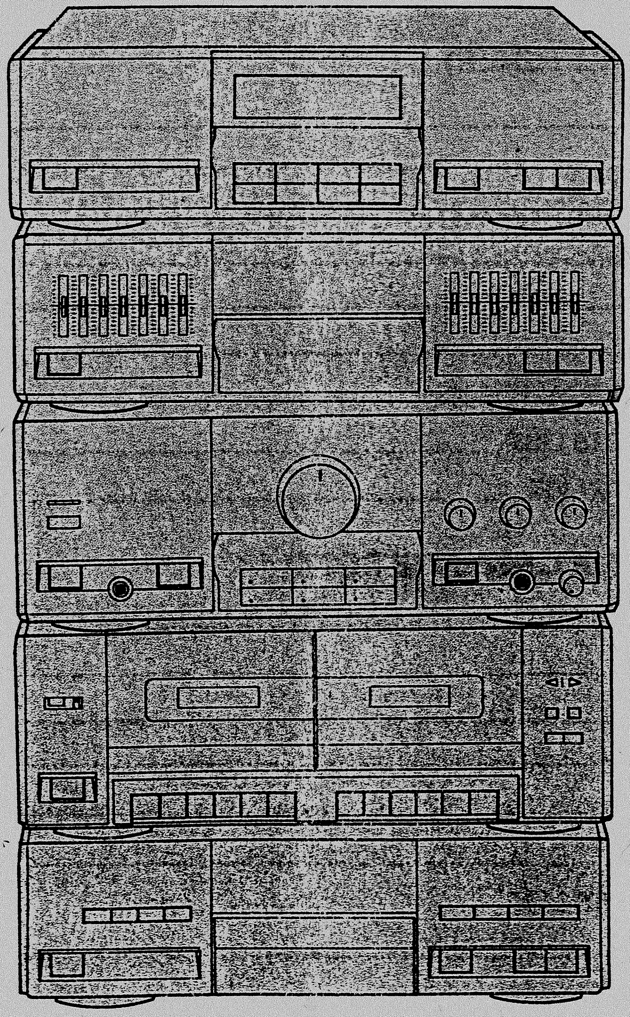
SERV. 30 957

065.717.1
065.722.1
065.727.0
065.728.8
065.740.3

SERVICE MANUAL

V4335/T4335/C4335/EQ4335/CD4335

COMPONENT SYSTEM



UNIVERSUM

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MODEL: T4335 (STEREO TUNER)

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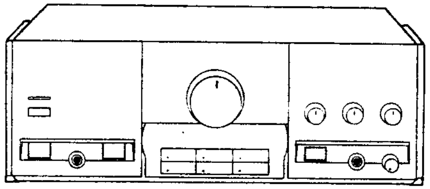
STEREO AMPLIFIER



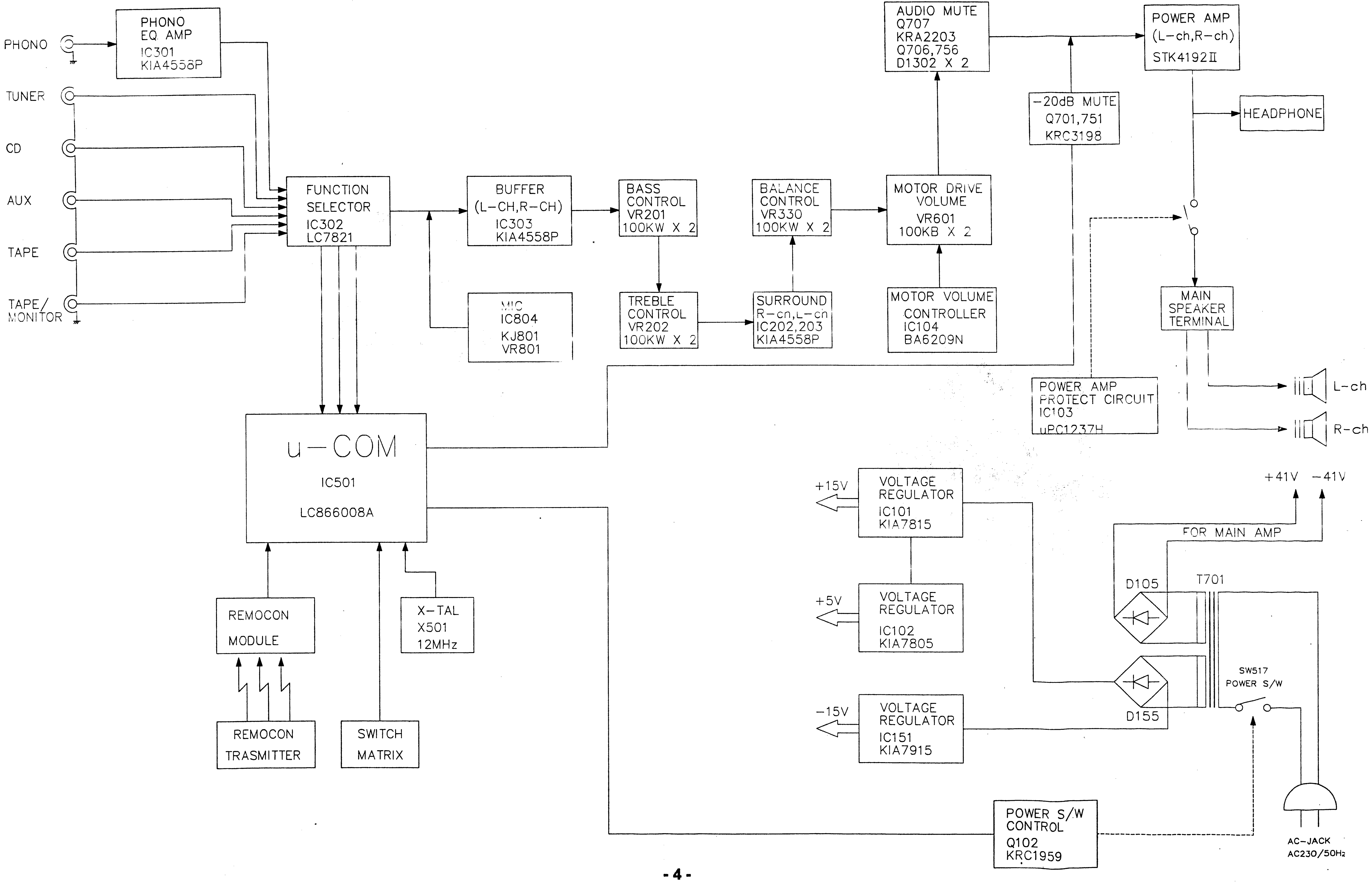
MODEL: V4335

SPECIFICATIONS

1) Output Power (8Ω, 2ch, THD 1%)	50W+50W
2) T.H.D.	0.05%
3) Frequency Response (−3dB Down)	10Hz~30kHz
4) Signal-to-noise Ratio (Unweighted/Weighted)	
Tuner/CDP/AUX/Tape	85dB/90dB
Phono	65dB/70dB
5) Tone Control (Bass: 100Hz, Treble: 10kHz)	±10dB
6) Input Sensitivity (G.P.I/Phono/Mic)	200mV/5mV/2.0mV
7) Channel Cross Talk (100Hz/1kHz/10kHz)	45dB/45dB/40dB
8) Power Requirement	AC 230V, 50Hz
9) Dimension (W x H x D)	376 x 130 x 312 (mm)

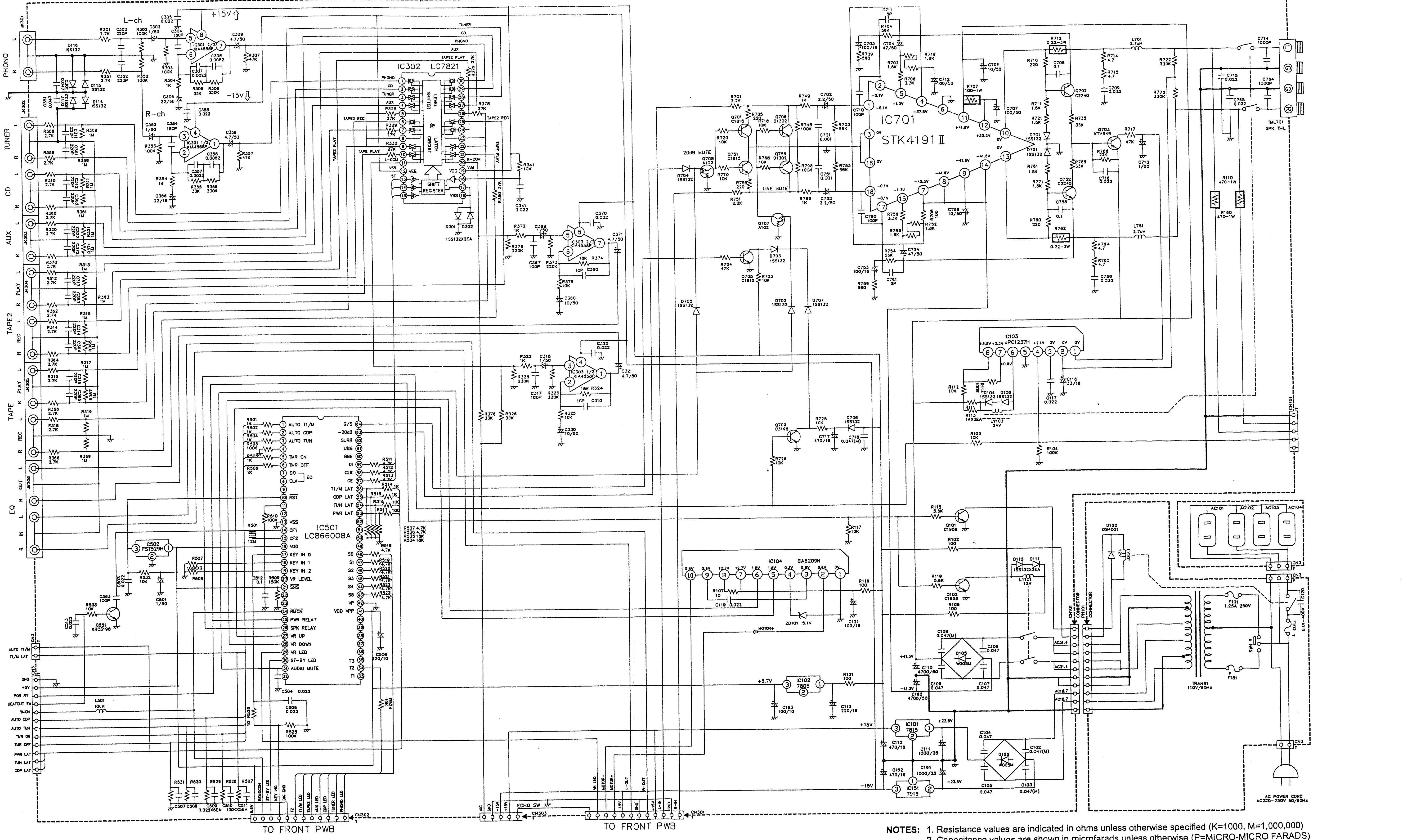
NOTE: Specifications are subject to change without notice for improvement.

BLOCK DIAGRAM


PHONO
PHONO EQ AMP IC301 KIA4558P
TUNER
CD
AUX
TAPE
TAPE/ MONITOR
FUNCTION SELECTOR IC302 LC7821
BUFFER (L-CH,R-CH) IC303 KIA4558P
MIC IC804 KJ801 VR801
BASS CONTROL VR201 100KW X 2
TREBLE CONTROL VR202 100KW X 2
BALANCE CONTROL VR330 100KW X 2
SURROUND R-ch,L-ch IC202,203 KIA4558P
MOTOR DRIVE VOLUME VR601 100KB X 2
MOTOR VOLUME CONTROLLER IC104 BA6209N
AUDIO MUTE Q707 KRA2203 Q706,756 D1302 X 2
-20dB MUTE Q701,751 KRC3198
POWER AMP (L-ch,R-ch) STK4192II
HEADPHONE
MAIN SPEAKER TERMINAL
L-ch
R-ch
POWER AMP PROTECT CIRCUIT IC103 uPC1237H
u-COM IC501 LC866008A
REMOCON MODULE
REMOCON TRASMITTER
X-TAL X501 12MHz
SWITCH MATRIX
+15V
VOLTAGE REGULATOR IC101 KIA7815
+5V
VOLTAGE REGULATOR IC102 KIA7805
-15V
VOLTAGE REGULATOR IC151 KIA7915
+41V
-41V
FOR MAIN AMP
D105
T701
D155
SW517 POWER S/W
POWER S/W CONTROL Q102 KRC1959
AC-JACK AC230/50Hz

SCHEMATIC DIAGRAM

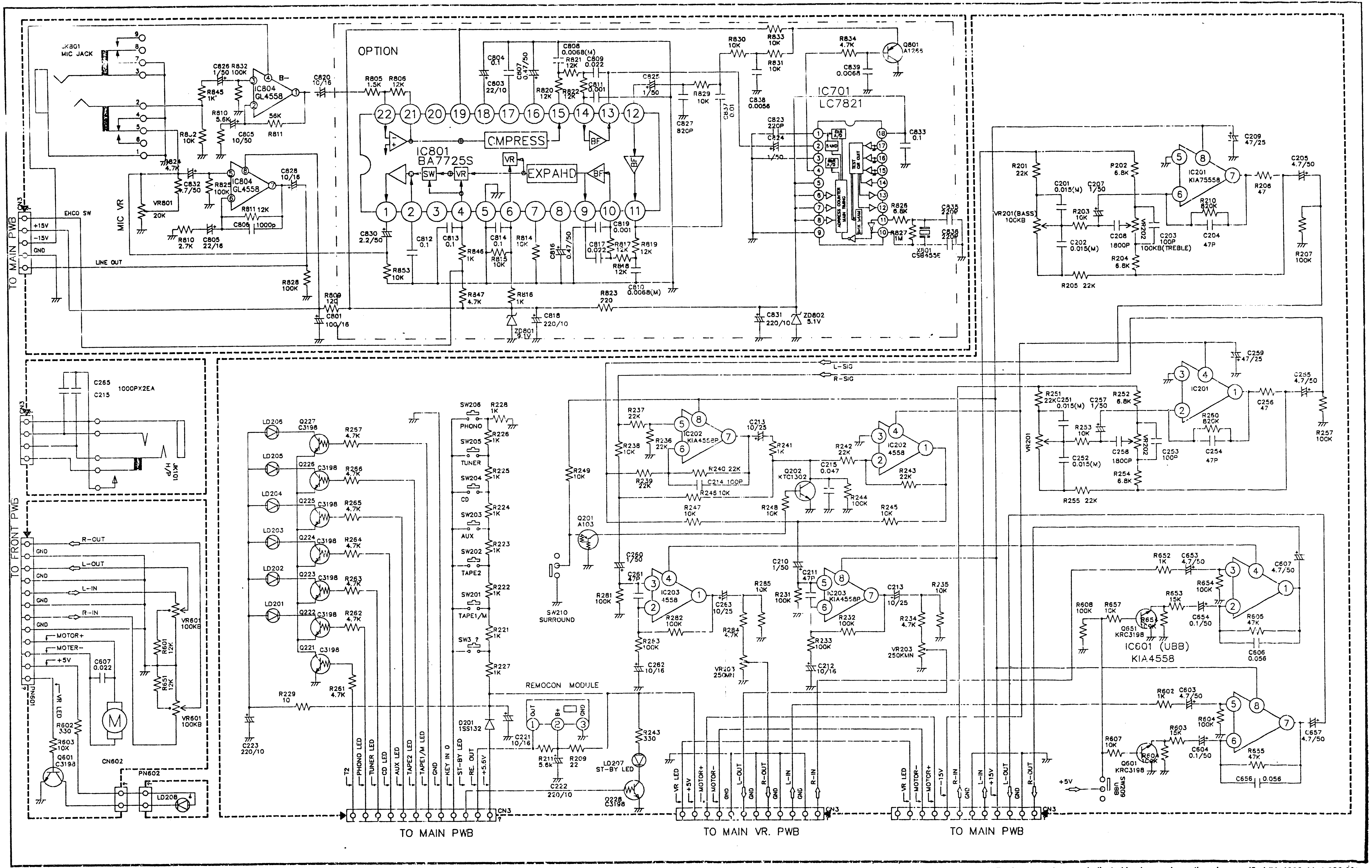
• MAIN CIRCUIT


PHONO
TUNER
CD
AUX
PLAY
TAPE2
REC
TAPE
OUT
EQ
IN
L-ch
R-ch
+15V
-15V
IC301 1/2 KIA4558P
IC301 2/2 KIA4558P
IC302 LC7821
LEVEL SHIFTER & LATCH CIRCUIT
SHIFT REGISTER
IC303 1/2 KIA4558P
IC303 2/2 KIA4558P
IC501 LC866008A
IC502 PST529H
IC701 STK4191 II
IC103 uPC1237H
IC104 BA6209N
IC102 7805
IC101 7815
IC151 7915
20dB MUTE
LINE MUTE
MOTOR+
ZD101 5.1V
D105 W005M
D158 W005M
TRANS1 110V/60Hz
F101 1.25A 250V
F151
AC POWER CORD AC220~230V 50/60Hz
TML701 SPK TML
LY101 12V
LY102 24V
AC101
AC102
AC103
AC104
CN101
CN102
CN301
CN302
CN303
CN701
ECHO SW
TO FRONT PWB
TO FRONT PWB
AUTO TI/M
TI/M LAT
GND
+5V
POR RY
BEATCUT SW
RMCN
AUTO COP
AUTO TUN
TMR ON
TMR OFF
PWR LAT
TUN LAT
COP LAT

NOTES: 1. Resistance values are indicated in ohms unless otherwise specified (K=1000, M=1,000,000)

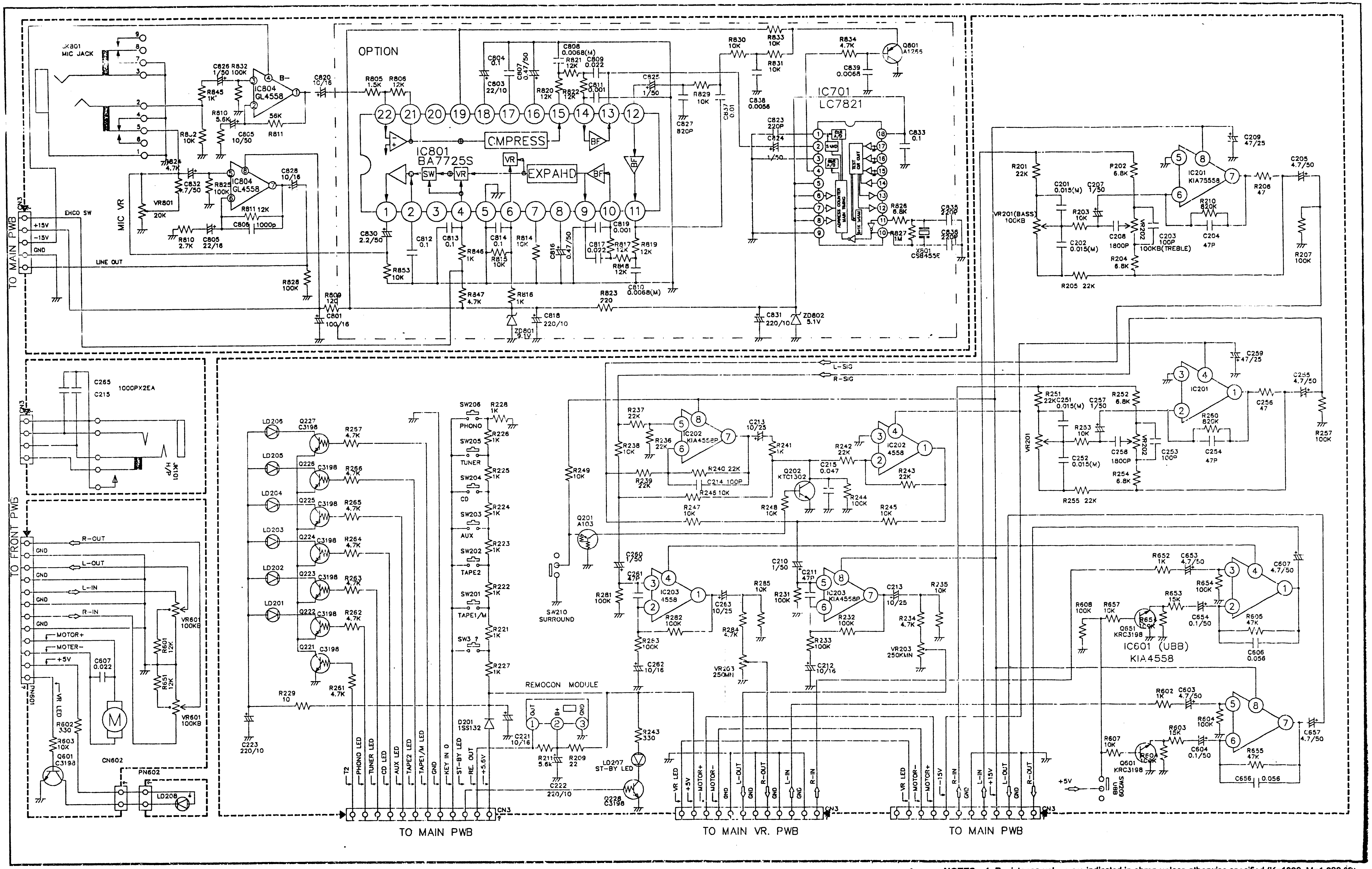
2. Capacitance values are shown in microfarads unless otherwise (P=MICRO-MICRO FARADS)

• SUB CIRCUIT


JK801 MIC JACK
OPTION
IC804 GL4558
IC801 BA7725S
CMPRESS
EXPAHD
SW
VR
BF
IC701 LC7821
Q801 A1255
X801 CSB455E
ZD801 9.1V
ZD802 5.1V
MIC VR
VR801 20K
EHCO SW
LINE OUT
+15V
-15V
GND
TO MAIN PWB
CN3
C265 C215 1000PX2EA
JK101 H/P
TO FRONT PWB
R-OUT
L-OUT
L-IN
R-IN
MOTOR+
MOTER-
+5V
VR601 100KB
VR LED
Q601 C3198
CN602
PN602
LD208
CN601
LD206
LD205
LD204
LD203
LD202
LD201
Q227 C3198
Q226 C3198
Q225 C3198
Q224 C3198
Q223 C3198
Q222 C3198
Q221 C3198
SW206 PHONO
SW205 TUNER
SW204 CD
SW203 AUX
SW202 TAPE2
SW201 TAPE1/M
SW3_?
REMOCON MODULE
D201 1SS132
LD207 ST-BY LED
Q228 C3198
T2
PHONO LED
TUNER LED
CD LED
AUX LED
TAPE2 LED
TAPE1/M LED
GND
KEY IN 0
ST-BY LED
RE. OUT
+5.6V
Q201 A103
SW210 SURROUND
L-SIG
R-SIG
IC202 KIA4558P
IC202 4558
Q202 KTC1302
IC203 4558
IC203 KIA4558P
VR203 250KMN
VR203 250MN
IC201 KIA75558
IC201
VR201(BASS) 100KB
VR202 100KB(TREBLE)
VR201
VR202
IC601 (U88) KIA4558
Q651 KRC3198
Q604 KRC3198
SW209 U88
TO MAIN PWB
TO MAIN VR. PWB
TO MAIN PWB
VR LED
+5V
MOTOR+
MOTOR-
GND
L-OUT
R-OUT
L-IN
R-IN
-15V
+15V

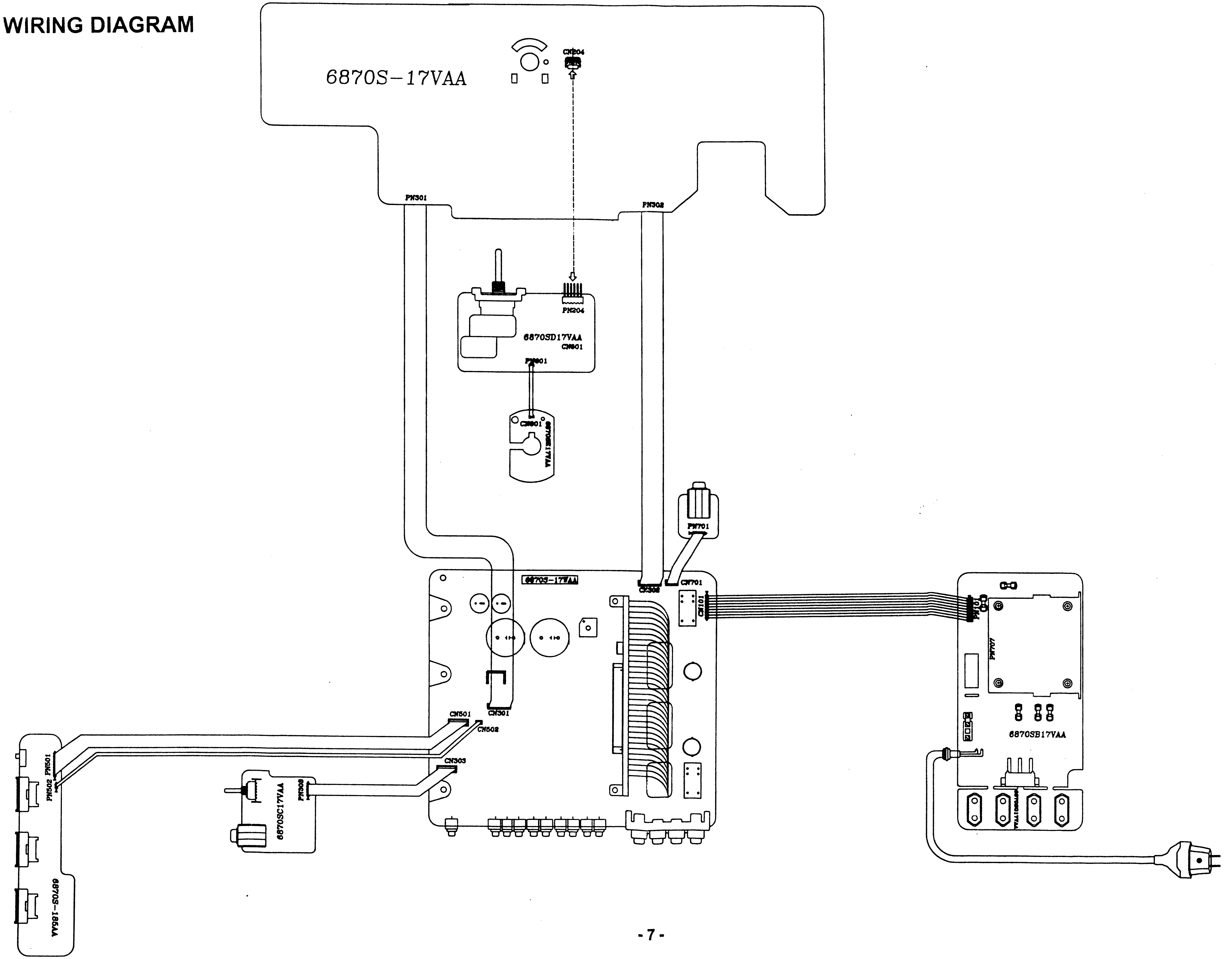
NOTES: 1. Resistance values are indicated in ohms unless otherwise specified (K=1000, M=1,000,000)
2. Capacitance values are shown in microfarads unless otherwise (P=MICRO-MICRO FARADS)

• SUB CIRCUIT


OPTION
IC801
BA7725S
CMPRESS
EXPAHD
IC701
LC7821
IC804
GL4558
MIC JACK
MIC VR
VR801
ECHO SW
LINE OUT
TO MAIN PWB
TO FRONT PWB
IC201
KIA7555B
VR201(BASS)
100KB(TREBLE)
IC202
KIA4558P
IC203
4558
Q202
KTC1302
Q201
A103
SW210
SURROUND
REMOCON MODULE
LD207
ST-BY LED
IC601 (UBB)
KIA4558
VR203
250KMN
SW206 PHONO
SW205 TUNER
SW204 CD
SW203 AUX
SW202 TAPE2
SW201 TAPE1/M
Q601
KRC3198
JK101
H/P
CN602
PN602
LD208
VR601
100KB
L-SIG
R-SIG
CN3
TO MAIN PWB
TO MAIN VR. PWB
TO MAIN PWB

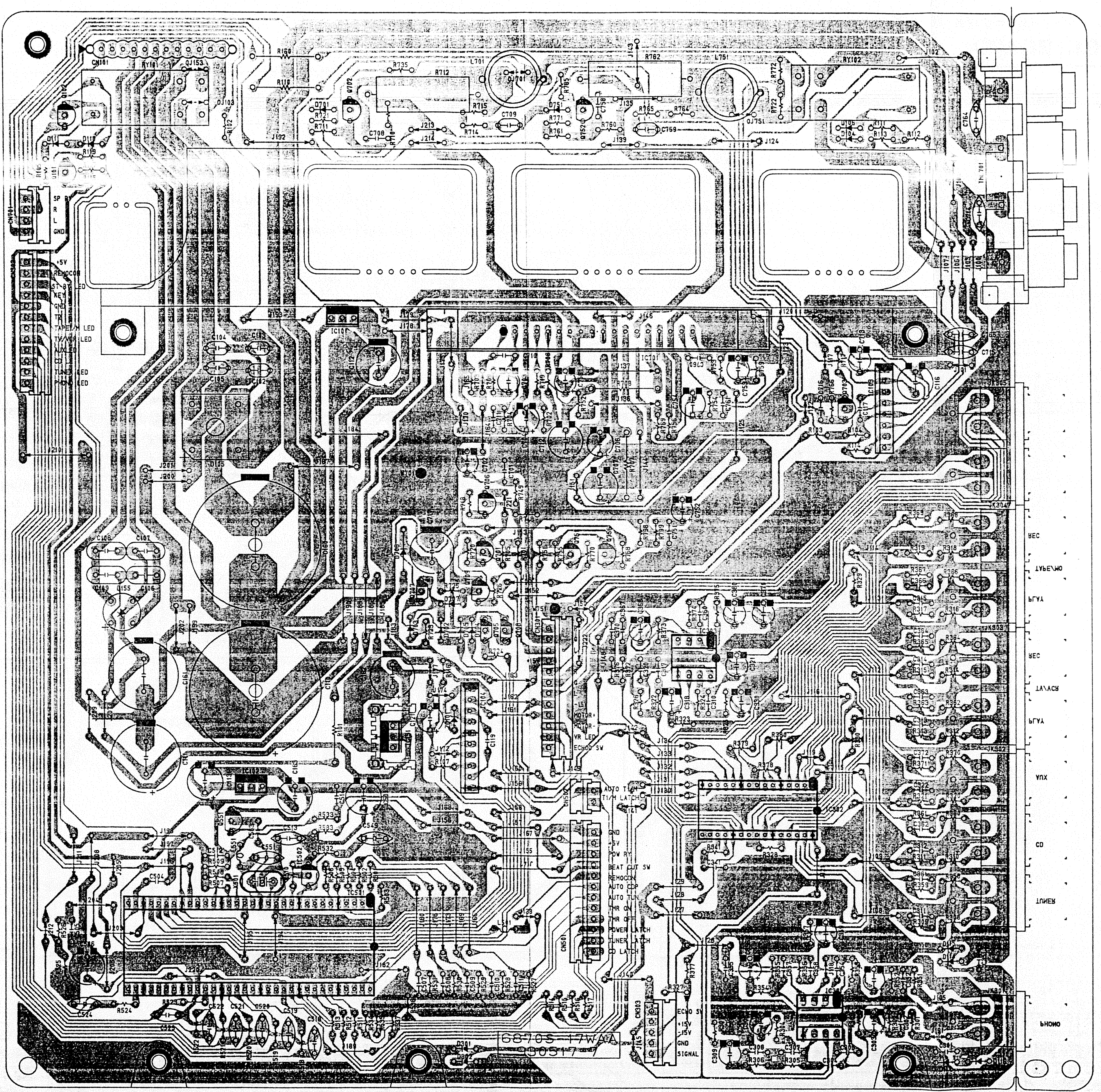
NOTES: 1. Resistance values are indicated in ohms unless otherwise specified (K=1000, M=1,000,00)
2. Capacitance values are shown in microfarads unless otherwise (P=MICRO-MICRO FARADS)

WIRING DIAGRAM

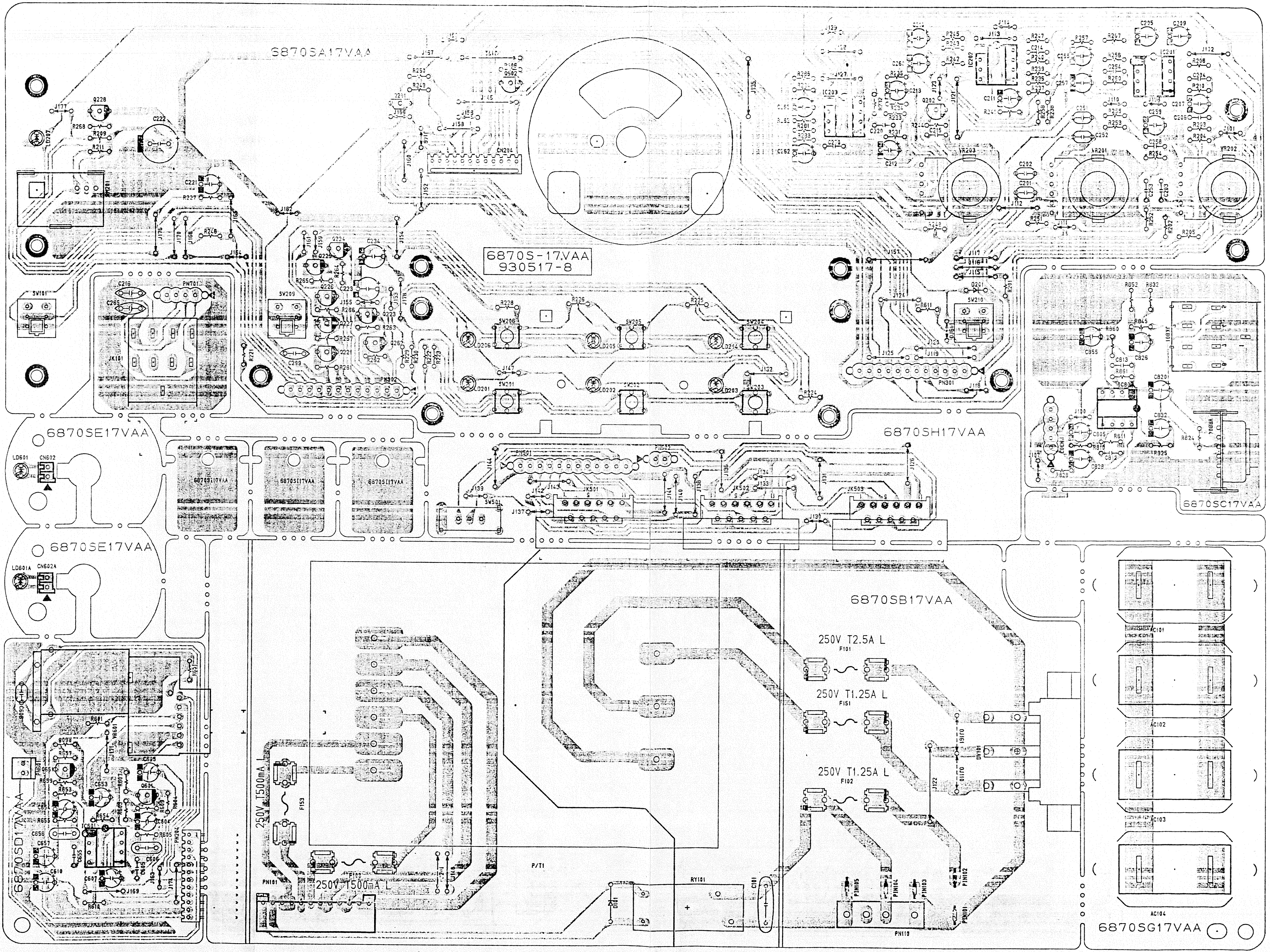

6870S-17VAA
CN204
PN301
PN302
PN204
6870SD17VAA
CN801
PN801
CN801
6870SE17VAA
PN701
CN701
6870S-17VAA
CN302
CN101
PN101
PN707
6870SB17VAA
CN501
CN502
CN301
CN303
PN501
PN502
PN303
6870SC17VAA
6870S-18SAA

PCB LAYOUT

- **MAIN P.C. BOARD**

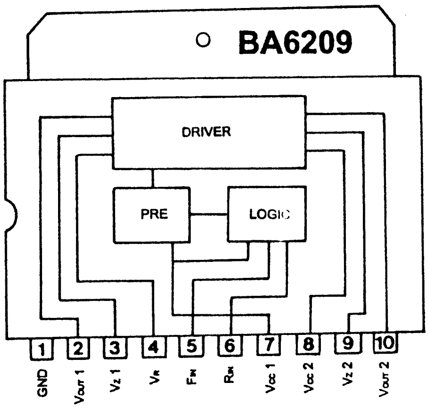

CN101
SP
R
L
GND
+5V
REMOCON
ST-BY LED
KEY
GND
TR
TAPE/M LED
TV/VCR LED
AUX LED
CD
TUNER LED
PHONO LED
IC101
IC701
MOTOR
VR LED
ECHO SW
AUTO T
T/M LATCH
GND
+5V
POW RY
BEAT CUT SW
REMOCON
AUTO CD
AUTO TUN
T/MR ON
T/MR OFF
POWER LATCH
TUNER LATCH
LATCH
CN501
CN303
ECHO SW
+15V
-15V
GND
SIGNAL
6870S 17WA
REC
TAPE/MO
PLAY
REC
TV/VCR
PLAY
AUX
CD
TUNER
PHONO

• SUB P.C. BOARD

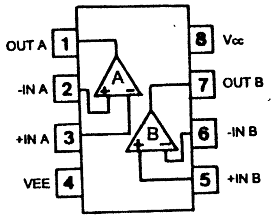

6870SA17VAA
6870S-17VAA
930517-8
6870SE17VAA
6870SE17VAA
6870SH17VAA
6870SC17VAA
6870SB17VAA
250V T2.5A L
F101
250V T1.25A L
F151
250V T1.25A L
F102
250V T500mA L
F153
250V T500mA L
6870SD17VAA
6870SG17VAA
AC101
AC102
AC103
AC104
P/T1
RY101
PN101
PN110
JK101
JK501
JK502
JK503
PN501
PN301
PN701
VR201
VR202
VR203
SW101
SW201
SW202
SW203
SW205
SW206
SW209
SW210
SW501
LD601
CN602
LD601A
CN602A
CN204
IC601
IC801
IC201
IC209

INTERNAL BLOCK DIAGRAM OF ICs

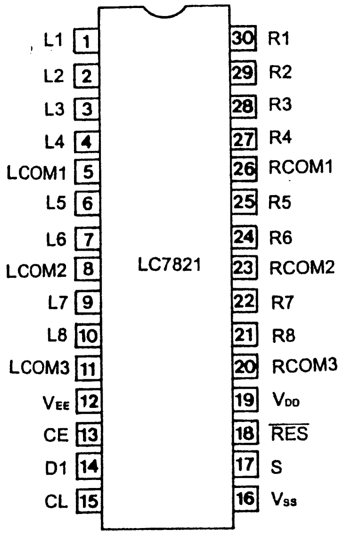
BA6209 (Reversible Motor Driver)

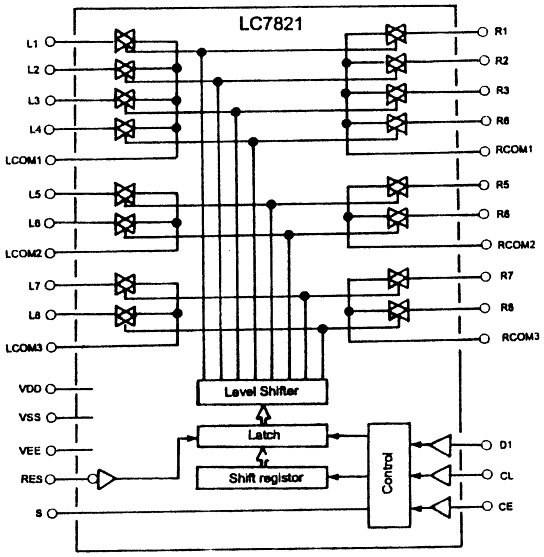

BA6209
DRIVER
PRE
LOGIC
1 GND
2 VOUT 1
3 VZ 1
4 VR
5 FIN
6 RIN
7 VCC 1
8 VCC 2
9 VZ 2
10 VOUT 2

KIA4558P
(Low Noise Operational Amplifier)

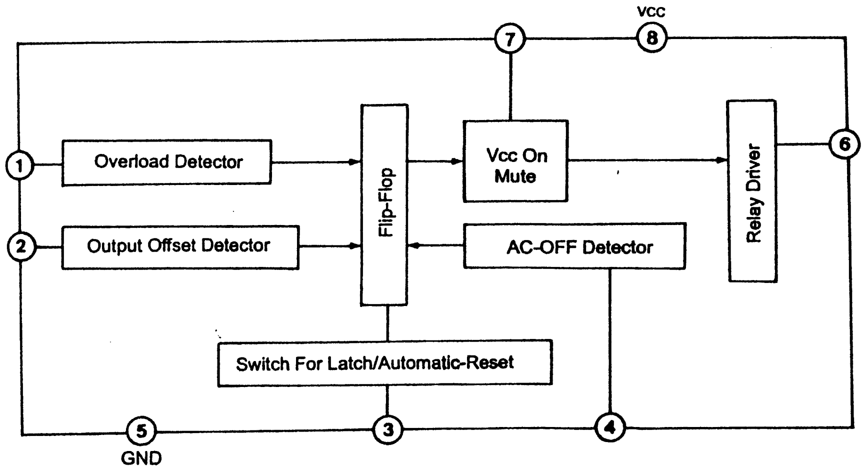

OUT A 1
-IN A 2
+IN A 3
VEE 4
8 VCC
7 OUT B
6 -IN B
5 +IN B
A
B

LC7821 (Analog Switch)

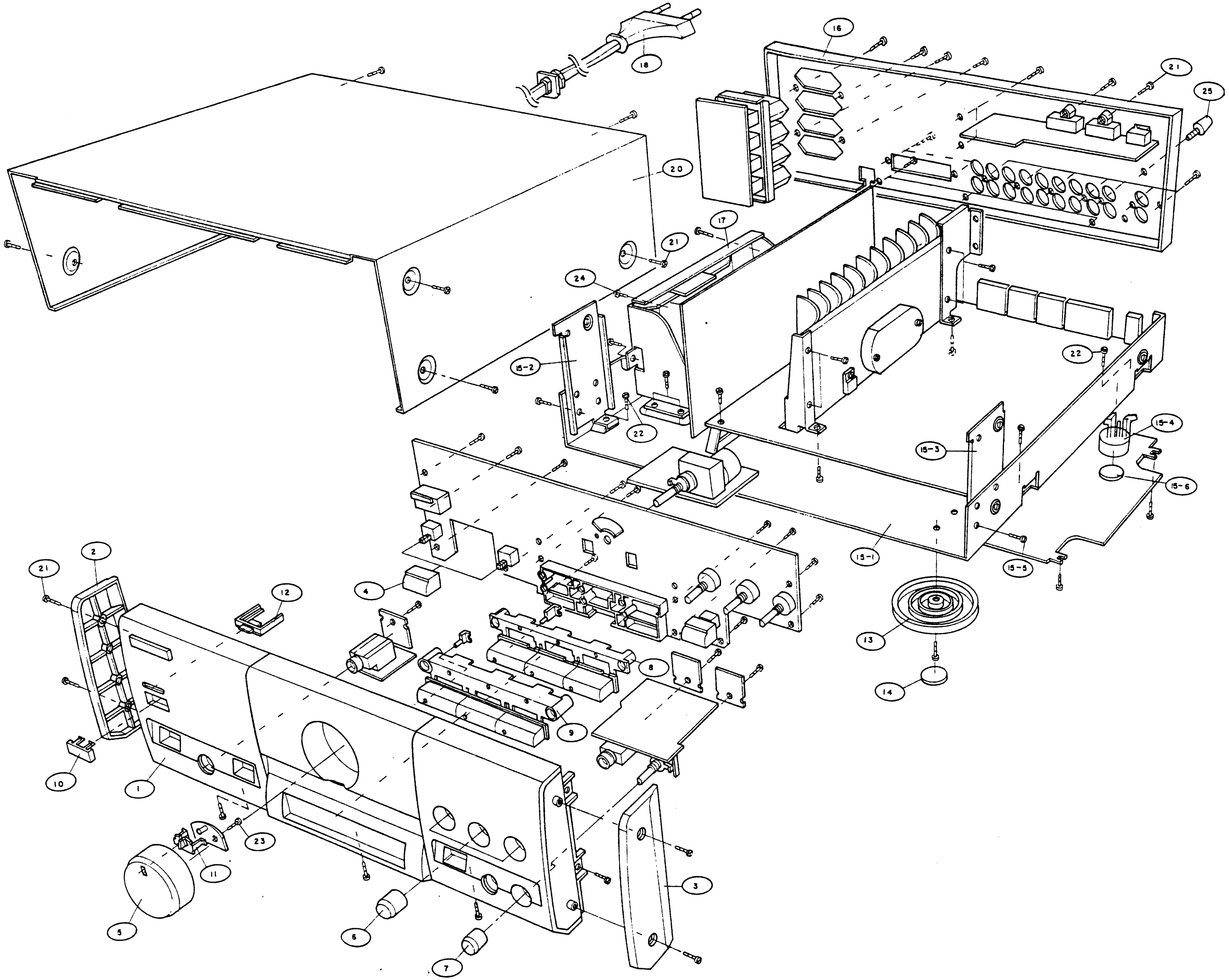

L1 1
L2 2
L3 3
L4 4
LCOM1 5
L5 6
L6 7
LCOM2 8
L7 9
L8 10
LCOM3 11
VEE 12
CE 13
D1 14
CL 15
30 R1
29 R2
28 R3
27 R4
26 RCOM1
25 R5
24 R6
23 RCOM2
22 R7
21 R8
20 RCOM3
19 VDD
18 RES
17 S
16 VSS
LC7821


LC7821
L1
L2
L3
L4
LCOM1
L5
L6
LCOM2
L7
L8
LCOM3
VDD
VSS
VEE
RES
S
R1
R2
R3
R4
RCOM1
R5
R6
RCOM2
R7
R8
RCOM3
D1
CL
CE
Level Shifter
Latch
Shift register
Control

μPC1237HA


VCC
8
7
1
2
6
5
3
4
GND
Overload Detector
Output Offset Detector
Flip-Flop
Vcc On Mute
AC-OFF Detector
Relay Driver
Switch For Latch/Automatic-Reset

EXPLODED VIEW/PARTS LIST



REF. NO.	PART NO.	DESCRIPTION	Q'TY
1	3720S-0041B	Panel, Front	1
2	246-516B	Decoration, Side(A) – L	1
3	246-517B	Decoration, Side(A) – R	1
4	4940S-0216A	Knob, Push	3
5	4940S-0217A	Knob, Volume	1
6	4940S-0218A	Knob, Tone	3
7	4940S-0219A	Knob, Mic Volume	1
8	4941SU0220A	Knob Assembly, Function – A	1
9	4941SU0221A	Knob Assembly, Function – B	1
10	463-054A	Lens, Remote	1
11	463-055A	Lens, Volume	1
12	463-057A	Lens, Stand – By	1
13	265-021A	Foot, Front	2
14	472-190C	Felt	2
15	3141SU0018A	Chassis Assembly, Main	1
15-1	3140S-0018A	Chassis, Main	1
15-2	4810S-0507A	Bracket, Side – L	1
15-3	4810S-0508A	Bracket, Side – R	1
15-4	265-004A	Foot, Rubber	1
15-5	1TRL0302018	Screw, 3x6	4
15-6	472-610F	Felt	2
16	3720S-0056B	Panel, Back	1
17	4810S-0501A	Bracket, Trans	1
18	681-005A	Cord, Power	1
19	564-024A	Plug Contact, Short Ring	2
20	213-532A	Cabinet, Top	1
21	353-025C	Screw, Special 3x10	46
22	1TRL0302018	Screw, 3x6	20
23	353-028C	Screw, 2x10	1
24	353-070C	Screw, 4x12	4
25	353-055A	Screw, Special	1

[REPLACEMENT PARTS LIST]

PAGE : 1

RUN-DATE : 93.05.26

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
			1TRL0302018	BRAIZER HEAD TA SCREW + 2 CUT	D 3.0 L 6.0 MSWR3/FZY	
			213-532A	CABINET	TOP (FA-532 BG1)	
			246-516B	DECORATION	SIDE(A)-L (FA-532 BU2)	
			246-517B	DECORATION	SIDE(A)-R (FA-532 BU2)	
			265-021A	FOOT	FRONT (FA-532 BG1)	
			265-022A	FOOT	RUBBER (FA-532 BG1)	
			3140S-0018A	CHASSIS	MAIN (FA-532 BG1)	
			3141SU0018A	CHASSIS ASSY	MAIN (FA-532)	
			316-803P	REMOCON ASSY	F-532L(UNIVERSUM) DONG-DO	
			324-797A	HOLDER	LED (FA-532 BG1)	
			353-028C	SCREW	* TAP TITE 2X10 FZMY	
			353-055A	SCREW	SPECIAL	
			353-070C	SCREW	* TAPPING,WASHER 4X12 FBK	
			3720S-0041B	PANEL	FRONT (FA-532 BU2)	
			3720S-0056B	PANEL	BACK (FA-532 BU2)	
			3875S-5008B	MANUAL, OPERATION ASSY	FA-532 BU2	
			3890S-C013D	BOX	(FA-532 BU2)	
			463-054A	LENS	REMOTE (FA-532)	
			463-055A	LENS	VOLUME (FA-532)	
			463-057A	LENS	STAND-BY (FA-532)	
			472-190C	FELT		
			4810S-0501A	BRACKET	TRANS (GSA-1)	
			4810S-0507A	BRACKET	SIDE-L(FA-532)	
			4810S-0508A	BRACKET	SIDE-R(FA-532)	
			4940S-0216A	KNOB	PUSH(FA-532 BG1)	
			4940S-0217A	KNOB	VOLUME(FA-532 BG1)	
			4940S-0218A	KNOB	TONE(FA-532 BG1)	
			4940S-0219A	KNOB	MIC VOL.(FA-532 BG1)	
			4941SU0220A	KNOB ASSY	FUNCTION-A (FA-532 BG1)	
			4941SU0221A	KNOB ASSY	FUNCTION-B (FA-532 BG1)	
			564-024A	PLUG CONTACT CORD,PHONE	SHORT RING	
			586-001C	FUSE HOLDER	PIN-T 5X20 KS (S)	
			681-005A	CORD POWER	681-004F+B172 KDK	
			6871S-17VAA	PWB ASSY	FA-532 SUB ASSY	
			6871S-17WAA	PWB ASSY	FA-532 MAIN	
			6871SA17VAA	PWB ASSY	FA-532 FRONT ASSY	
			6871SA17WAA	PWB ASSY	FA-532 MAIN	
			6871SB17VAA	PWB ASSY	FA-532 POWER ASSY	
			6871SC17VAA	PWB ASSY	FA-532 MIC ASSY	
			6871SD17VAA	PWB ASSY	FA-532 MAIN VR	
			6871SE17VAA	PWB ASSY	FA-532 VR LED	
			6871SF17VAA	PWB ASSY	FA-532 H/P JACK	
			6871SG17VAA	PWB ASSY	FA-532 ACOUTLET	
			6871SH17VAA	PWB ASSY	PWB ASSY(FA-532 CONTROL JACK)	
			6873SC17VAA	AUTO INSERT PWB ASSY	FA-532 MIC ASSY	
			6873SD17VAA	AUTO INSERT PWB ASSY	FA-532 MAIN VR	
		AC101	565-004B	CONCENT	AC OUTLET S-I6536#01DEM.SEM(S)	
		AC102	565-004B	CONCENT	AC OUTLET S-I6536#01DEM.SEM(S)	
		AC103	565-004B	CONCENT	AC OUTLET S-I6536#01DEM.SEM(S)	
		AC104	565-004B	CONCENT	AC OUTLET S-I6536#01DEM.SEM(S)	

[REPLACEMENT PARTS LIST]

PAGE : 2

RUN-DATE : 93.05.26

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		CN101	561-647L	CONNECTOR	F-WIRE HOLDER MX51052-1200 (S)	
		CN204	561-805L	CONNECTOR	WAFER,B TO B 53095-1210	
		CN301	561-646L	CONNECTOR	CONNECTOR MLX 520111210,12PIN	
		CN302	561-646L	CONNECTOR	CONNECTOR MLX 520111210,12PIN	
		CN303	561-646E	CONNECTOR	CONNECTOR MLX 520110510,05PIN	
		CN501	561-646L	CONNECTOR	CONNECTOR MLX 520111210,12PIN	
		CN602	GBBF100J	*CONNECTOR ASSY GS	C,AY GSIL-G02/IL-J02(21)180(S)	
		CN701	561-646D	CONNECTOR	CONNECTOR MLX 520110410 04PIN	
		C101	624-005B	CAPACITOR ELECTROLYTIC DOIB	C103P 400V VDE CAF2G103PNDSU-3	
		C102	0CQ4731N409	CAPACITOR POLYESTER(MYLAR)	0.047U 100V J POLY TP	
		C103	0CQ4731N409	CAPACITOR POLYESTER(MYLAR)	0.047U 100V J POLY TP	
		C104	0CQ4731N409	CAPACITOR POLYESTER(MYLAR)	0.047U 100V J POLY TP	
		C105	0CQ4731N409	CAPACITOR POLYESTER(MYLAR)	0.047U 100V J POLY TP	
		C106	0CQ4731N409	CAPACITOR POLYESTER(MYLAR)	0.047U 100V J POLY TP	
		C107	0CQ4731N409	CAPACITOR POLYESTER(MYLAR)	0.047U 100V J POLY TP	
		C108	0CQ4731N409	CAPACITOR POLYESTER(MYLAR)	0.047U 100V J POLY TP	
		C109	0CQ4731N409	CAPACITOR POLYESTER(MYLAR)	0.047U 100V J POLY TP	
		C110	CE478F17	CAPACITOR,ELECTROLYTIC	30X40 4700MF-50V S/W-HG	
		C111	0CE1081J650	CAPACITOR,ELECTROLYTIC	1000M SM 35V M FM7.5	
		C112	0CE477CF618	CAPACITOR,ELECTROLYTIC	470UF SHL 16V M FL TP5	
		C113	0CE2276F618	CAPACITOR,ELECTROLYTIC	220M SMS 16V M FM5 TP(5)	
		C116	0CE3366F618	CAPACITOR,ELECTROLYTIC	33M SMS 16V M FL TP(5)	
		C117	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C119	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C121	0CE1076F618	CAPACITOR,ELECTROLYTIC	100M SMS 16V M FM5 TP(5)	
		C160	CE478F17	CAPACITOR,ELECTROLYTIC	30X40 4700MF-50V S/W-HG	
		C161	0CE1081J650	CAPACITOR,ELECTROLYTIC	1000M SM 35V M FM7.5	
		C162	0CE477CF618	CAPACITOR,ELECTROLYTIC	470UF SHL 16V M FL TP5	
		C163	0CE1076F618	CAPACITOR,ELECTROLYTIC	100M SMS 16V M FM5 TP(5)	
		C201	0CQ1531N409	CAPACITOR POLYESTER(MYLAR)	0.015U 100V J POLY TP	
		C202	0CQ1531N409	CAPACITOR POLYESTER(MYLAR)	0.015U 100V J POLY TP	
		C203	0CN1010K518	CAPACITOR TUBULA(HIGH DIELE)	100P 50V K B TA26	
		C204	0CX4700K408	CAPACITOR TUBULA(T.C)	47P 50V J SL TA26	
		C205	0CE4766F618	CAPACITOR,ELECTROLYTIC	47M SMS 16V M FL TP(5)	
		C207	0CE1056K618	CAPACITOR,ELECTROLYTIC	1.0M SMS 50V M FL TP(5)	
		C208	0CN1820F668	CAPACITOR TUBULA(HIGH DIELE)	1800P 16V M X TA26	
		C209	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C210	0CE1056K618	CAPACITOR,ELECTROLYTIC	1.0M SMS 50V M FL TP(5)	
		C211	0CE2256K618	CAPACITOR,ELECTROLYTIC	2.2M SMS 50V M FL TP(5)	
		C212	0CE4766F618	CAPACITOR,ELECTROLYTIC	47M SMS 16V M FL TP(5)	
		C213	0CE4756K618	CAPACITOR,ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C214	0CN1010K518	CAPACITOR TUBULA(HIGH DIELE)	100P 50V K B TA26	
		C215	0CN4730K948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.047UF 50V Z F TA26	
		C216	0CK2230K945	CAPACITOR CERAMIC(HIGH DIELE)	0.022M 50V Z F TS	
		C220	0CX4700K408	CAPACITOR TUBULA(T.C)	47P 50V J SL TA26	
		C221	0CE1066F618	CAPACITOR,ELECTROLYTIC	10M SMS 16V M FM5 TP(5)	
		C222	0CE2276D618	CAPACITOR,ELECTROLYTIC	220M SMS 10V M FM5 TP(5)	
		C223	0CE2276D618	CAPACITOR,ELECTROLYTIC	220M SMS 10V M FM5 TP(5)	
		C234	0CE2276D618	CAPACITOR,ELECTROLYTIC	220M SMS 10V M FM5 TP(5)	
		C251	0CQ1531N409	CAPACITOR POLYESTER(MYLAR)	0.015U 100V J POLY TP	

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		C252	0CQ1531N409	CAPACITOR POLYESTER(MYLAR)	0.015U 100V J POLY TP	
		C253	0CN1010K518	CAPACITOR TUBULA(HIGH DIELE)	100P 50V K B TA26	
		C254	0CX4700K408	CAPACITOR TUBULA(T.C)	47P 50V J SL TA26	
		C255	0CE4766F618	CAPACITOR,ELECTROLYTIC	47M SMS 16V M FL TP(5)	
		C257	0CE1056K618	CAPACITOR,ELECTROLYTIC	1.0M SMS 50V M FL TP(5)	
		C258	0CN1820F668	CAPACITOR TUBULA(HIGH DIELE)	1800P 16V M X TA26	
		C259	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C260	0CE1056K618	CAPACITOR,ELECTROLYTIC	1.0M SMS 50V M FL TP(5)	
		C262	0CE4766F618	CAPACITOR,ELECTROLYTIC	47M SMS 16V M FL TP(5)	
		C263	0CE4756K618	CAPACITOR,ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C265	0CK2230K945	CAPACITOR CERAMIC(HIGH DIELE)	0.022M 50V Z F TS	
		C270	0CX4700K408	CAPACITOR TUBULA(T.C)	47P 50V J SL TA26	
		C299	0CK2230K945	CAPACITOR CERAMIC(HIGH DIELE)	0.022M 50V Z F TS	
		C301	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C302	0CN2210K518	CAPACITOR TUBULA(HIGH DIELE)	220P 50V K B TA26	
		C303	0CE1056K618	CAPACITOR,ELECTROLYTIC	1.0M SMS 50V M FL TP(5)	
		C304	0CN1220F668	CAPACITOR TUBULA(HIGH DIELE)	1200P 16V M X TA26	
		C305	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C306	0CE2266F618	CAPACITOR,ELECTROLYTIC	22M SMS 16V M FM5 TP(5)	
		C307	0CN2220F668	CAPACITOR TUBULA(HIGH DIELE)	2200P 16V M X TA26	
		C308	0CN8220F678	CAPACITOR TUBULA(HIGH DIELE)	8200P 16V M Y TA26	
		C309	0CE4756K618	CAPACITOR,ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C311	0CN2210K518	CAPACITOR TUBULA(HIGH DIELE)	220P 50V K B TA26	
		C312	0CN2210K518	CAPACITOR TUBULA(HIGH DIELE)	220P 50V K B TA26	
		C313	0CN2210K518	CAPACITOR TUBULA(HIGH DIELE)	220P 50V K B TA26	
		C315	0CN2210K518	CAPACITOR TUBULA(HIGH DIELE)	220P 50V K B TA26	
		C317	0CN2210K518	CAPACITOR TUBULA(HIGH DIELE)	220P 50V K B TA26	
		C318	0CE1056K618	CAPACITOR,ELECTROLYTIC	1.0M SMS 50V M FL TP(5)	
		C320	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C321	0CE4756K618	CAPACITOR,ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C322	0CN2210K518	CAPACITOR TUBULA(HIGH DIELE)	220P 50V K B TA26	
		C330	0CE1066K618	CAPACITOR,ELECTROLYTIC	10M SMS 50V M FM5 TP(5)	
		C341	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C351	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C352	0CN2210K518	CAPACITOR TUBULA(HIGH DIELE)	220P 50V K B TA26	
		C353	0CE1056K618	CAPACITOR,ELECTROLYTIC	1.0M SMS 50V M FL TP(5)	
		C354	0CN1220F668	CAPACITOR TUBULA(HIGH DIELE)	1200P 16V M X TA26	
		C355	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C356	0CE2266F618	CAPACITOR,ELECTROLYTIC	22M SMS 16V M FM5 TP(5)	
		C357	0CN2220F668	CAPACITOR TUBULA(HIGH DIELE)	2200P 16V M X TA26	
		C358	0CN8220F678	CAPACITOR TUBULA(HIGH DIELE)	8200P 16V M Y TA26	
		C359	0CE4756K618	CAPACITOR,ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C361	0CN2210K518	CAPACITOR TUBULA(HIGH DIELE)	220P 50V K B TA26	
		C362	0CN2210K518	CAPACITOR TUBULA(HIGH DIELE)	220P 50V K B TA26	
		C363	0CN2210K518	CAPACITOR TUBULA(HIGH DIELE)	220P 50V K B TA26	
		C366	0CN2210K518	CAPACITOR TUBULA(HIGH DIELE)	220P 50V K B TA26	
		C367	0CN2210K518	CAPACITOR TUBULA(HIGH DIELE)	220P 50V K B TA26	
		C368	0CE1056K618	CAPACITOR,ELECTROLYTIC	1.0M SMS 50V M FL TP(5)	
		C370	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C371	0CE4756K618	CAPACITOR,ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		C372	0CN2210K518	CAPACITOR TUBULA(HIGH DIELE)	220P 50V K B TA26	
		C380	0CE1066K618	CAPACITOR,ELECTROLYTIC	10M SMS 50V M FM5 TP(5)	
		C501	0CE2276F618	CAPACITOR,ELECTROLYTIC	220M SMS 16V M FM5 TP(5)	
		C504	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C505	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C506	0CE2276F618	CAPACITOR,ELECTROLYTIC	220M SMS 16V M FM5 TP(5)	
		C507	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C508	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C509	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C510	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C511	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C512	0CN1040K948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.1UF 50V Z F TA26	
		C513	0CK2230K945	CAPACITOR CERAMIC(HIGH DIELE)	0.022M 50V Z F TS	
		C514	0CK1020K945	CAPACITOR,CERAMIC(HIGH DIELE)	1000P 50V Z F TS	
		C518	0CK1010K515	CAPACITOR,CERAMIC(HIGH DIELE)	100P 50V K B TS	
		C519	0CK1010K515	CAPACITOR,CERAMIC(HIGH DIELE)	100P 50V K B TS	
		C520	0CK1010K515	CAPACITOR,CERAMIC(HIGH DIELE)	100P 50V K B TS	
		C521	0CK1010K515	CAPACITOR,CERAMIC(HIGH DIELE)	100P 50V K B TS	
		C522	0CK1010K515	CAPACITOR,CERAMIC(HIGH DIELE)	100P 50V K B TS	
		C523	0CK1010K515	CAPACITOR,CERAMIC(HIGH DIELE)	100P 50V K B TS	
		C524	0CK1010K515	CAPACITOR,CERAMIC(HIGH DIELE)	100P 50V K B TS	
		C549	0CK2230K945	CAPACITOR CERAMIC(HIGH DIELE)	0.022M 50V Z F TS	
		C551	0CK4730K945	CAPACITOR CERAMIC(HIGH DIELE)	0.047U 50V Z F TS	
		C563	0CN1010K518	CAPACITOR TUBULA(HIGH DIELE)	100P 50V K B TA26	
		C603	0CE4756K618	CAPACITOR,ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C604	0CE1046K618	CAPACITOR,ELECTROLYTIC	0.1M SMS 50V M FL TP(5)	
		C605	0CX4700K408	CAPACITOR TUBULA(T.C)	47P 50V J SL TA26	
		C606	0CQ5631N409	CAPACITOR POLYESTER(MYLAR)	0.056U 100V J POLY TP	
		C607	0CE4756K618	CAPACITOR,ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C608	0CQ2231N409	CAPACITOR POLYESTER(MYLAR)	0.022U 100V J POLY TP	
		C610	0CE4766F618	CAPACITOR,ELECTROLYTIC	47M SMS 16V M FL TP(5)	
		C653	0CE4756K618	CAPACITOR,ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C654	0CE1046K618	CAPACITOR,ELECTROLYTIC	0.1M SMS 50V M FL TP(5)	
		C655	0CX4700K408	CAPACITOR TUBULA(T.C)	47P 50V J SL TA26	
		C656	0CQ5631N409	CAPACITOR POLYESTER(MYLAR)	0.056U 100V J POLY TP	
		C657	0CE4756K618	CAPACITOR,ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C701	0CN1020K518	CAPACITOR TUBULA(HIGH DIELE)	1000P 50V K B TA26	
		C702	0CE2256K618	CAPACITOR,ELECTROLYTIC	2.2M SMS 50V M FL TP(5)	
		C703	0CE1076F618	CAPACITOR,ELECTROLYTIC	100M SMS 16V M FM5 TP(5)	
		C704	0CE4766K618	CAPACITOR,ELECTROLYTIC	47M SMS 50V M FM5 TP(5)	
		C706	0CE1066K618	CAPACITOR,ELECTROLYTIC	10M SMS 50V M FM5 TP(5)	
		C707	0CE1076K618	CAPACITOR,ELECTROLYTIC	100UF SMS 50V M FL TP5	
		C708	0CN1040K948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.1UF 50V Z F TA26	
		C709	0CQ3331N409	CAPACITOR POLYESTER(MYLAR)	0.033U 100V J POLY TP	
		C710	0CN1010K518	CAPACITOR TUBULA(HIGH DIELE)	100P 50V K B TA26	
		C713	0CE1056K618	CAPACITOR,ELECTROLYTIC	1.0M SMS 50V M FL TP(5)	
		C714	0CK1020K945	CAPACITOR,CERAMIC(HIGH DIELE)	1000P 50V Z F TS	
		C715	0CK2230K945	CAPACITOR CERAMIC(HIGH DIELE)	0.022M 50V Z F TS	
		C716	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C717	0CE477CF618	CAPACITOR,ELECTROLYTIC	470UF SHL 16V M FL TP5	

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		C751	0CN1020K518	CAPACITOR TUBULA(HIGH DIELE)	1000P 50V K B TA26	
		C752	0CE2256K618	CAPACITOR,ELECTROLYTIC	2.2M SMS 50V M FL TP(5)	
		C753	0CE1076F618	CAPACITOR,ELECTROLYTIC	100M SMS 16V M FM5 TP(5)	
		C754	0CE4766K618	CAPACITOR,ELECTROLYTIC	47M SMS 50V M FM5 TP(5)	
		C756	0CE1066K618	CAPACITOR,ELECTROLYTIC	10M SMS 50V M FM5 TP(5)	
		C758	0CN1040K948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.1UF 50V Z F TA26	
		C759	0CQ3331N409	CAPACITOR POLYESTER(MYLAR)	0.033U 100V J POLY TP	
		C760	0CN1010K518	CAPACITOR TUBULA(HIGH DIELE)	100P 50V K B TA26	
		C764	0CK1020K945	CAPACITOR,CERAMIC(HIGH DIELE)	1000P 50V Z F TS	
		C765	0CK2230K945	CAPACITOR CERAMIC(HIGH DIELE)	0.022M 50V Z F TS	
		C805	0CE2266F618	CAPACITOR,ELECTROLYTIC	22M SMS 16V M FM5 TP(5)	
		C820	0CE1066F618	CAPACITOR,ELECTROLYTIC	10M SMS 16V M FM5 TP(5)	
		C826	0CE1056K618	CAPACITOR,ELECTROLYTIC	1.0M SMS 50V M FL TP(5)	
		C828	0CE4766F618	CAPACITOR,ELECTROLYTIC	47M SMS 16V M FL TP(5)	
		C832	0CE4756K618	CAPACITOR,ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C855	0CE1066F618	CAPACITOR,ELECTROLYTIC	10M SMS 16V M FM5 TP(5)	
		D101	0DD400200CA	DIODE	1N4002(DO-41),RECT, RECTRON	
		D104	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D105	0DD604000CA	DIODE	PBPC604,BRIDGE,SILITEK	
		D106	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D110	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D111	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D114	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D115	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D116	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D117	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D155	0DD151000FA	DIODE	PBM151,BRID,SILITER,FORMING	
		D201	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D301	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D302	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D701	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D702	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D703	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D704	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D705	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D706	0DD400109BA	DIODE	SI RECT 50V 1A,1N4001	
		D707	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D751	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		F102	0FT1251B513	FUSE TIME LAG	1.25A 250V 5.2X20 G SMK	
		F103	0FT5000B513	FUSE TIME LAG	0.5A 250V 5.2X20 G SMK	
		F151	0FT1251B513	FUSE TIME LAG	1.25A 250V 5.2X20 G SMK	
		F153	0FT5000B513	FUSE TIME LAG	0.5A 250V 5.2X20 G SMK	
		HS101	255-009C	HEAT SINK	GSW-9300,GCD-60P)	
		IC101	0IKE781500B	IC,KEC	KIA7815PI 15V 1A,KEC	
		IC102	0IGS780500A	IC, GOLDSTAR ELECTRON	GL7805 REGULATOR	
		IC103	0INE123700A	IC, NEC	UPC1237H RELAY DRIVE NEC (S)	
		IC104	0IRH620900B	IC, ROHM	BA6209N MOTOR DRIVER	
		IC151	0INS791500A	IC, NATIONAL SEMICONDUCTOR	LM7915CT (15V REG 1A),N/S	
		IC201	0IKE455800A	IC, KEC	KIA4558P 8DIP LIN OP-AMP	
		IC202	0IKE455800A	IC, KEC	KIA4558P 8DIP LIN OP-AMP	

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		IC203	0IKE455800A	IC, KEC	KIA4558P 8DIP LIN OP-AMP	
		IC301	0IKE455800A	IC, KEC	KIA4558P 8DIP LIN OP-AMP	
		IC302	0ISA782100B	IC,SANYO	LC7821N ANALOG S/W2CX8P,SANYO	
		IC303	0IKE455800A	IC, KEC	KIA4558P 8DIP LIN OP-AMP	
		IC501	0ISA866008C	IC,SANYO	LC86008A-5220 MICOM AMP,SANY	
		IC502	0IMT529009A	IC,MITSUMI	PST529H-2 TP 3.1V,MITSUMI	
		IC601	0IKE455800A	IC, KEC	KIA4558P 8DIP LIN OP-AMP	
		IC701	0ISA419200A	IC,SANYO	STK4192-2 PWR 50W SANYO	
		IC803	0IKE455800A	IC, KEC	KIA4558P 8DIP LIN OP-AMP	
		JK101	572-334A	JACK 6.4	HLJ5315-01-4010 H=12.5 9PIN	
		JK301	576-002B	JACK RCA	JACK,BLOCK S-436P-2P(WH/RD)(S)	
		JK302	576-002D	JACK RCA	JACK,BLOCK S-438P-6P (WH/RD)	
		JK303	576-002A	JACK RCA	JACK,BLOCK S-437P-4P(WH/RD)(S)	
		JK304	576-002A	JACK RCA	JACK,BLOCK S-437P-4P(WH/RD)(S)	
		JK305	576-002A	JACK RCA	JACK,BLOCK S-437P-4P(WH/RD)(S)	
		JK501	561-904K	CONNECTOR	WAFER,SMK CFG1111-0101	
		JK502	561-904K	CONNECTOR	WAFER,SMK CFG1111-0101	
		JK801	572-334A	JACK 6.4	HLJ5315-01-4010 H=12.5 9PIN	
		LD201	0DL340009AM	DIODE,LED	SLR-34DC 83F 215 TP ROHM	
		LD202	0DL340009AM	DIODE,LED	SLR-34DC 83F 215 TP ROHM	
		LD203	0DL340009AM	DIODE,LED	SLR-34DC 83F 215 TP ROHM	
		LD204	0DL340009AM	DIODE,LED	SLR-34DC 83F 215 TP ROHM	
		LD205	0DL340009AM	DIODE,LED	SLR-34DC 83F 215 TP ROHM	
		LD206	0DL340009AM	DIODE,LED	SLR-34DC 83F 215 TP ROHM	
		LD207	0DL340009AE	DIODE,LED	SLR-34URC 83F 215(RD) ROHM-K	
		LD601	0DL340009AM	DIODE,LED	SLR-34DC 83F 215 TP ROHM	
		L501	0LA0102K018	INDUCTOR AXIAL LEAD	10M K 2.3X3.4 L5 TP	
		L551	0LA0102K018	INDUCTOR AXIAL LEAD	10M K 2.3X3.4 L5 TP	
		L701	636-403A	COIL CHOKE RF	INDUCTOR,F 3.2UH (S)	
		L751	636-403A	COIL CHOKE RF	INDUCTOR,F 3.2UH (S)	
		PIN101	561-910C	CONNECTOR	TERMINAL SEMKO PCB-ROCKING	
		PIN102	561-910C	CONNECTOR	TERMINAL SEMKO PCB-ROCKING	
		PIN103	561-910C	CONNECTOR	TERMINAL SEMKO PCB-ROCKING	
		PIN104	561-910C	CONNECTOR	TERMINAL SEMKO PCB-ROCKING	
		PIN105	561-910C	CONNECTOR	TERMINAL SEMKO PCB-ROCKING	
		PN101	561-636L	CONNECTOR	WIRE TRAP MX52012-1210 AN TYPE	
		PN204	561-804L	CONNECTOR	HOUSING,B TO B 52084-1210	
		PN301	561-647L	CONNECTOR	F-WIRE HOLDER MX51052-1200 (S)	
		PN302	561-647L	CONNECTOR	F-WIRE HOLDER MX51052-1200 (S)	
		PN303	561-647E	CONNECTOR	F-WIRE HOLDER MX51052-0500 (S)	
		X501	616-020Z	FILTER CERAMIC	CST12.0MTW MURATA	
		ZD101	0DZ510009HA	DIODE,ZENER	MTZ5.1-B T-77 5.1V TP,ROHM/K	
		PN501	561-647L	CONNECTOR	F-WIRE HOLDER MX51052-1200 (S)	
		PN601	561-715B	CONNECTOR	WAFER, G/S GIL-G-02P-S3T2-E(S)	
		PN701	561-647D	CONNECTOR	F-WIRE HOLDER MX51052-0400 (S)	
		P1	641-805Y	TRANS POWER	115/230 50160HZ,TK/ZP (BLK)	
		Q101	0TR320209AA	TRANSISTOR	KTC3202-TP-Y (KTC1959)KEC	
		Q102	0TR320209AA	TRANSISTOR	KTC3202-TP-Y (KTC1959)KEC	
		Q201	0TR103009AF	TRANSISTOR	KRA103M TP,KEC(KRA2203)	
		Q202	0TR130209AA	TRANSISTOR	KTD1302 MUTING TP,KEC	

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		Q221	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q223	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q224	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q225	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q226	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q227	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q228	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q262	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q551	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q601	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q602	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q651	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q701	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q702	0TR320009AA	TRANSISTOR	KTC3200-TP-GR (KTC2240)KEC	
		Q703	0TR949009AA	TRANSISTOR	KTA949-Y TP, KEC	
		Q705	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q706	0TR130209AA	TRANSISTOR	KTD1302 MUTING TP,KEC	
		Q707	0TR103009AF	TRANSISTOR	KRA103M TP,KEC(KRA2203)	
		Q708	0TR103009AF	TRANSISTOR	KRA103M TP,KEC(KRA2203)	
		Q709	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q751	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q752	0TR320009AA	TRANSISTOR	KTC3200-TP-GR (KTC2240)KEC	
		Q756	0TR130209AA	TRANSISTOR	KTD1302 MUTING TP,KEC	
		RM201	668-090R	INTEGRATED CIRCUIT	DJT-004 MODULE(38KHZ),D/J	
		RY101	557-021A	RELAY	RELAY, VB-12MB TAKAMISAWA	
		RY101	557-023D	RELAY	VS-12MBU-5 DC12V 1A TAKAMISAWA	
		RY102	557-021B	RELAY	RELAY,VB-24MBU-5 TAKAMISAWA	
		R101	0RN1000H634	RESISTOR FIX METAL FILM	100 1/2W 5 MF15	
		R102	0RD1000F608	RESISTOR,FIXED CARBON FILM	100 1/6W 5 TA26	
		R103	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R104	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R105	0RD1000F608	RESISTOR,FIXED CARBON FILM	100 1/6W 5 TA26	
		R107	0RD0102F608	RESISTOR,FIXED CARBON FILM	10 1/6W 5 TA26	
		R110	0RS1201J634	RESISTOR,FIX METAL FILM OXIDE	1.20K 1W 5% MF15	
		R111	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R112	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R113	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R114	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R115	0RD8201F608	RESISTOR,FIXED CARBON FILM	8.2K 1/6W 5 TA26	
		R116	0RD1000F608	RESISTOR,FIXED CARBON FILM	100 1/6W 5 TA26	
		R119	0RD8201F608	RESISTOR,FIXED CARBON FILM	8.2K 1/6W 5 TA26	
		R160	0RS1201J634	RESISTOR,FIX METAL FILM OXIDE	1.20K 1W 5% MF15	
		R201	0RD2202F608	RESISTOR,FIXED CARBON FILM	22K 1/6W 5 TA26	
		R202	0RD6801F608	RESISTOR,FIXED CARBON FILM	6.8K 1/6W 5 TA26	
		R203	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R204	0RD6801F608	RESISTOR,FIXED CARBON FILM	6.8K 1/6W 5 TA26	
		R205	0RD2202F608	RESISTOR,FIXED CARBON FILM	22K 1/6W 5 TA26	
		R206	0RD0472F608	RESISTOR,FIXED CARBON FILM	47 1/6W 5 TA26	
		R207	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R209	0RD0222F608	RESISTOR,FIXED CARBON FILM	22 1/6W 5 TA26	

⌐REPLACEMENT PARTS LIST⌐

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S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		R210	0RD8203F608	RESISTOR,FIXED CARBON FILM	820K 1/6W 5 TA26	
		R211	0RD5601F608	RESISTOR,FIXED CARBON FILM	5.6K 1/6W 5 TA26	
		R221	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R222	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R223	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R224	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R225	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R226	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R227	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R228	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R229	0RD0102F608	RESISTOR,FIXED CARBON FILM	10 1/6W 5 TA26	
		R230	0RD0102F608	RESISTOR,FIXED CARBON FILM	10 1/6W 5 TA26	
		R231	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R232	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R233	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R234	0RD2701F608	RESISTOR,FIXED CARBON FILM	2.7K 1/6W 5 TA26	
		R236	0RD2202F608	RESISTOR,FIXED CARBON FILM	22K 1/6W 5 TA26	
		R237	0RD2202F608	RESISTOR,FIXED CARBON FILM	22K 1/6W 5 TA26	
		R238	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R239	0RD2202F608	RESISTOR,FIXED CARBON FILM	22K 1/6W 5 TA26	
		R240	0RD2202F608	RESISTOR,FIXED CARBON FILM	22K 1/6W 5 TA26	
		R241	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R242	0RD2202F608	RESISTOR,FIXED CARBON FILM	22K 1/6W 5 TA26	
		R243	0RD2202F608	RESISTOR,FIXED CARBON FILM	22K 1/6W 5 TA26	
		R244	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R245	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R246	0RD3300F608	RESISTOR,FIXED CARBON FILM	330 1/6W 5 TA26	
		R247	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R248	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R249	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R250	0RD3300F608	RESISTOR,FIXED CARBON FILM	330 1/6W 5 TA26	
		R251	0RD2202F608	RESISTOR,FIXED CARBON FILM	22K 1/6W 5 TA26	
		R252	0RD6801F608	RESISTOR,FIXED CARBON FILM	6.8K 1/6W 5 TA26	
		R253	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R254	0RD6801F608	RESISTOR,FIXED CARBON FILM	6.8K 1/6W 5 TA26	
		R255	0RD2202F608	RESISTOR,FIXED CARBON FILM	22K 1/6W 5 TA26	
		R256	0RD0472F608	RESISTOR,FIXED CARBON FILM	47 1/6W 5 TA26	
		R257	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R258	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R260	0RD8203F608	RESISTOR,FIXED CARBON FILM	820K 1/6W 5 TA26	
		R268	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R281	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R282	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R283	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R284	0RD2701F608	RESISTOR,FIXED CARBON FILM	2.7K 1/6W 5 TA26	
		R301	0RD2701F608	RESISTOR,FIXED CARBON FILM	2.7K 1/6W 5 TA26	
		R302	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R303	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R304	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R305	0RD3302F608	RESISTOR,FIXED CARBON FILM	33K 1/6W 5 TA26	

⌐REPLACEMENT PARTS LIST⌐

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S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		R306	0RD3303F608	RESISTOR,FIXED CARBON FILM	330K 1/6W 5 TA26	
		R307	0RD4702F608	RESISTOR,FIXED CARBON FILM	47K 1/6W 5 TA26	
		R308	0RD2701F608	RESISTOR,FIXED CARBON FILM	2.7K 1/6W 5 TA26	
		R309	0RD1004F608	RESISTOR,FIXED CARBON FILM	1.0M 1/6W 5 TA26	
		R310	0RD2701F608	RESISTOR,FIXED CARBON FILM	2.7K 1/6W 5 TA26	
		R311	0RD1004F608	RESISTOR,FIXED CARBON FILM	1.0M 1/6W 5 TA26	
		R312	0RD2701F608	RESISTOR,FIXED CARBON FILM	2.7K 1/6W 5 TA26	
		R313	0RD1004F608	RESISTOR,FIXED CARBON FILM	1.0M 1/6W 5 TA26	
		R314	0RD2701F608	RESISTOR,FIXED CARBON FILM	2.7K 1/6W 5 TA26	
		R315	0RD1004F608	RESISTOR,FIXED CARBON FILM	1.0M 1/6W 5 TA26	
		R316	0RD2701F608	RESISTOR,FIXED CARBON FILM	2.7K 1/6W 5 TA26	
		R317	0RD1004F608	RESISTOR,FIXED CARBON FILM	1.0M 1/6W 5 TA26	
		R318	0RD2701F608	RESISTOR,FIXED CARBON FILM	2.7K 1/6W 5 TA26	
		R319	0RD1004F608	RESISTOR,FIXED CARBON FILM	1.0M 1/6W 5 TA26	
		R320	0RD2701F608	RESISTOR,FIXED CARBON FILM	2.7K 1/6W 5 TA26	
		R321	0RD1004F608	RESISTOR,FIXED CARBON FILM	1.0M 1/6W 5 TA26	
		R322	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R323	0RD2203F608	RESISTOR,FIXED CARBON FILM	220K 1/6W 5 TA26	
		R324	0RD1802F608	RESISTOR,FIXED CARBON FILM	18K 1/6W 5 TA26	
		R325	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R326	0RD2203F608	RESISTOR,FIXED CARBON FILM	220K 1/6W 5 TA26	
		R327	0RD2702F608	RESISTOR,FIXED CARBON FILM	27K 1/6W 5 TA26	
		R328	0RD2702F608	RESISTOR,FIXED CARBON FILM	27K 1/6W 5 TA26	
		R329	0RD2702F608	RESISTOR,FIXED CARBON FILM	27K 1/6W 5 TA26	
		R330	0RD2702F608	RESISTOR,FIXED CARBON FILM	27K 1/6W 5 TA26	
		R341	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R351	0RD2701F608	RESISTOR,FIXED CARBON FILM	2.7K 1/6W 5 TA26	
		R352	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R353	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R354	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R355	0RD3302F608	RESISTOR,FIXED CARBON FILM	33K 1/6W 5 TA26	
		R356	0RD3303F608	RESISTOR,FIXED CARBON FILM	330K 1/6W 5 TA26	
		R357	0RD4702F608	RESISTOR,FIXED CARBON FILM	47K 1/6W 5 TA26	
		R358	0RD2701F608	RESISTOR,FIXED CARBON FILM	2.7K 1/6W 5 TA26	
		R359	0RD1004F608	RESISTOR,FIXED CARBON FILM	1.0M 1/6W 5 TA26	
		R360	0RD2701F608	RESISTOR,FIXED CARBON FILM	2.7K 1/6W 5 TA26	
		R361	0RD1004F608	RESISTOR,FIXED CARBON FILM	1.0M 1/6W 5 TA26	
		R362	0RD2701F608	RESISTOR,FIXED CARBON FILM	2.7K 1/6W 5 TA26	
		R363	0RD1004F608	RESISTOR,FIXED CARBON FILM	1.0M 1/6W 5 TA26	
		R364	0RD2701F608	RESISTOR,FIXED CARBON FILM	2.7K 1/6W 5 TA26	
		R365	0RD1004F608	RESISTOR,FIXED CARBON FILM	1.0M 1/6W 5 TA26	
		R366	0RD2701F608	RESISTOR,FIXED CARBON FILM	2.7K 1/6W 5 TA26	
		R367	0RD1004F608	RESISTOR,FIXED CARBON FILM	1.0M 1/6W 5 TA26	
		R368	0RD2701F608	RESISTOR,FIXED CARBON FILM	2.7K 1/6W 5 TA26	
		R369	0RD1004F608	RESISTOR,FIXED CARBON FILM	1.0M 1/6W 5 TA26	
		R370	0RD2701F608	RESISTOR,FIXED CARBON FILM	2.7K 1/6W 5 TA26	
		R371	0RD1004F608	RESISTOR,FIXED CARBON FILM	1.0M 1/6W 5 TA26	
		R372	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R373	0RD2203F608	RESISTOR,FIXED CARBON FILM	220K 1/6W 5 TA26	
		R374	0RD1802F608	RESISTOR,FIXED CARBON FILM	18K 1/6W 5 TA26	

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		R375	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R376	0RD2203F608	RESISTOR,FIXED CARBON FILM	220K 1/6W 5 TA26	
		R377	0RD2702F608	RESISTOR,FIXED CARBON FILM	27K 1/6W 5 TA26	
		R378	0RD2702F608	RESISTOR,FIXED CARBON FILM	27K 1/6W 5 TA26	
		R379	0RD2702F608	RESISTOR,FIXED CARBON FILM	27K 1/6W 5 TA26	
		R380	0RD2702F608	RESISTOR,FIXED CARBON FILM	27K 1/6W 5 TA26	
		R501	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R502	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R503	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R504	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R505	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R506	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R507	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R508	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R509	0RD1503F608	RESISTOR,FIXED CARBON FILM	150K 1/6W 5 TA26	
		R510	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R511	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R512	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R513	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R514	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R515	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R516	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R517	0RD1000F608	RESISTOR,FIXED CARBON FILM	100 1/6W 5 TA26	
		R518	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R519	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R520	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R521	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R522	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R523	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R524	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R525	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R526	0RD0102F608	RESISTOR,FIXED CARBON FILM	10 1/6W 5 TA26	
		R527	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R528	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R529	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R530	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R531	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R532	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R533	0RD5601F608	RESISTOR,FIXED CARBON FILM	5.6K 1/6W 5 TA26	
		R534	0RD4701F608	RESISTOR,FIXED CARBON FILM	4.7K 1/6W 5 TA26	
		R535	0RD4701F608	RESISTOR,FIXED CARBON FILM	4.7K 1/6W 5 TA26	
		R536	0RD4701F608	RESISTOR,FIXED CARBON FILM	4.7K 1/6W 5 TA26	
		R537	0RD4701F608	RESISTOR,FIXED CARBON FILM	4.7K 1/6W 5 TA26	
		R583	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R601	0RD2202F608	RESISTOR,FIXED CARBON FILM	22K 1/6W 5 TA26	
		R603	0RD1502F608	RESISTOR,FIXED CARBON FILM	15K 1/6W 5 TA26	
		R604	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R605	0RD4702F608	RESISTOR,FIXED CARBON FILM	47K 1/6W 5 TA26	
		R606	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R607	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		R608	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R609	0RD4703F608	RESISTOR,FIXED CARBON FILM	470K 1/6W 5 TA26	
		R610	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R611	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R651	0RD2202F608	RESISTOR,FIXED CARBON FILM	22K 1/6W 5 TA26	
		R653	0RD1502F608	RESISTOR,FIXED CARBON FILM	15K 1/6W 5 TA26	
		R654	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R655	0RD4702F608	RESISTOR,FIXED CARBON FILM	47K 1/6W 5 TA26	
		R657	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R659	0RD4703F608	RESISTOR,FIXED CARBON FILM	470K 1/6W 5 TA26	
		R701	0RD2201F608	RESISTOR,FIXED CARBON FILM	2.2K 1/6W 5 TA26	
		R702	0RD1801F608	RESISTOR,FIXED CARBON FILM	1.8K 1/6W 5 TA26	
		R703	0RD5602F608	RESISTOR,FIXED CARBON FILM	56K 1/6W 5 TA26	
		R704	0RD5602F608	RESISTOR,FIXED CARBON FILM	56K 1/6W 5 TA26	
		R705	0RD2200F608	RESISTOR,FIXED CARBON FILM	220 1/6W 5 TA26	
		R706	0RD3301F608	RESISTOR,FIXED CARBON FILM	3.3K 1/6W 5 TA26	
		R707	0RN1000H634	RESISTOR FIX METAL FILM	100 1/2W 5 MF15	
		R708	0RN1000H634	RESISTOR FIX METAL FILM	100 1/2W 5 MF15	
		R709	0RD5600F608	RESISTOR,FIXED CARBON FILM	560 1/6W 5 TA26	
		R710	0RD2200F608	RESISTOR,FIXED CARBON FILM	220 1/6W 5 TA26	
		R711	0RD1501F608	RESISTOR,FIXED CARBON FILM	1.5K 1/6W 5 TA26	
		R712	614-005T	RESISTOR WIRE WOUND DOIB	R, REC WIRE WOUND 3W 0.22J	
		R714	0RD0471F608	RESISTOR,FIXED CARBON FILM	4.7 1/6W 5 TA26	
		R715	0RD0471F608	RESISTOR,FIXED CARBON FILM	4.7 1/6W 5 TA26	
		R717	0RD4702F608	RESISTOR,FIXED CARBON FILM	47K 1/6W 5 TA26	
		R718	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R719	0RD1801F608	RESISTOR,FIXED CARBON FILM	1.8K 1/6W 5 TA26	
		R720	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R721	0RD1501F608	RESISTOR,FIXED CARBON FILM	1.5K 1/6W 5 TA26	
		R722	0RD3303F608	RESISTOR,FIXED CARBON FILM	330K 1/6W 5 TA26	
		R723	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R724	0RD4702F608	RESISTOR,FIXED CARBON FILM	47K 1/6W 5 TA26	
		R725	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R726	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R735	0RD3302F608	RESISTOR,FIXED CARBON FILM	33K 1/6W 5 TA26	
		R748	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R749	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R751	0RD2201F608	RESISTOR,FIXED CARBON FILM	2.2K 1/6W 5 TA26	
		R752	0RD1801F608	RESISTOR,FIXED CARBON FILM	1.8K 1/6W 5 TA26	
		R753	0RD5602F608	RESISTOR,FIXED CARBON FILM	56K 1/6W 5 TA26	
		R754	0RD5602F608	RESISTOR,FIXED CARBON FILM	56K 1/6W 5 TA26	
		R755	0RD2200F608	RESISTOR,FIXED CARBON FILM	220 1/6W 5 TA26	
		R756	0RD3301F608	RESISTOR,FIXED CARBON FILM	3.3K 1/6W 5 TA26	
		R759	0RD5600F608	RESISTOR,FIXED CARBON FILM	560 1/6W 5 TA26	
		R760	0RD2200F608	RESISTOR,FIXED CARBON FILM	220 1/6W 5 TA26	
		R761	0RD1501F608	RESISTOR,FIXED CARBON FILM	1.5K 1/6W 5 TA26	
		R762	614-005T	RESISTOR WIRE WOUND DOIB	R, REC WIRE WOUND 3W 0.22J	
		R764	0RD0471F608	RESISTOR,FIXED CARBON FILM	4.7 1/6W 5 TA26	
		R765	0RD0471F608	RESISTOR,FIXED CARBON FILM	4.7 1/6W 5 TA26	
		R766	0RD2202F608	RESISTOR,FIXED CARBON FILM	22K 1/6W 5 TA26	

[REPLACEMENT PARTS LIST]

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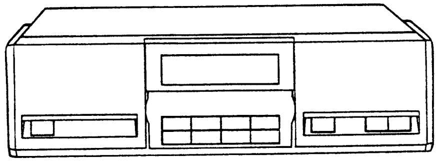
RUN-DATE : 93.05.26

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		R768	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R769	0RD1801F608	RESISTOR,FIXED CARBON FILM	1.8K 1/6W 5 TA26	
		R770	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R771	0RD1501F608	RESISTOR,FIXED CARBON FILM	1.5K 1/6W 5 TA26	
		R772	0RD3303F608	RESISTOR,FIXED CARBON FILM	330K 1/6W 5 TA26	
		R785	0RD3302F608	RESISTOR,FIXED CARBON FILM	33K 1/6W 5 TA26	
		R798	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R799	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R810	0RD2701F608	RESISTOR,FIXED CARBON FILM	2.7K 1/6W 5 TA26	
		R811	0RD1202F608	RESISTOR,FIXED CARBON FILM	12K 1/6W 5 TA26	
		R824	0RD4701F608	RESISTOR,FIXED CARBON FILM	4.7K 1/6W 5 TA26	
		R825	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R828	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R832	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R852	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R860	0RD5601F608	RESISTOR,FIXED CARBON FILM	5.6K 1/6W 5 TA26	
		R861	0RD5602F608	RESISTOR,FIXED CARBON FILM	56K 1/6W 5 TA26	
		SW101	554-635D	SWITCH PUSH	JTP 2286NA JEIL	
		SW201	558T026A	SWITCH SPECIAL	TACT EVQ-114 04M H=4.3 TP	
		SW202	558T026A	SWITCH SPECIAL	TACT EVQ-114 04M H=4.3 TP	
		SW203	558T026A	SWITCH SPECIAL	TACT EVQ-114 04M H=4.3 TP	
		SW204	558T026A	SWITCH SPECIAL	TACT EVQ-114 04M H=4.3 TP	
		SW205	558T026A	SWITCH SPECIAL	TACT EVQ-114 04M H=4.3 TP	
		SW206	558T026A	SWITCH SPECIAL	TACT EVQ-114 04M H=4.3 TP	
		SW209	554-635C	SWITCH PUSH	JTP 2286A JEIL	
		SW210	554-635C	SWITCH PUSH	JTP 2286A JEIL	
		SW501	552-020A	SWITCH SLIDE	,SLIDE 00120050B(N) L8N	
		TML701	561-100D	CONNECTOR	TERMIANL SPEAKER SP-026B	
		VR201	611-663B	RESISTOR VARIABLLE	RK16K1280-100KBX2 L=20(F),CC	
		VR202	611-663B	RESISTOR VARIABLLE	RK16K1280-100KBX2 L=20(F),CC	
		VR203	611-663A	RESISTOR VARIABLLE	RK16K1280-250KMN L=20(F),CC	
		VR601	611-646K	RESISTOR VARIABLLE	RK16Y12MC1R214B	
		VR804	611-647Z	RESISTOR VARIABLLE	VR,K162N0Z14-20KAX2 L=20	

*** END OF DATA ***

STEREO TUNER



MODEL : T4335

SPECIFICATIONS

1. FM

1) Tuning Range .... 87.5MHz~108.0MHz
2) Intermediate Frequency 10.7MHz
3) Usable Sensitivity 90.1MHz, 98.1MHz, 106.1MHz 6dB
4) Signal-to-noise Ratio (Mono/Stereo) 70dB/65dB
5) Image Rejection 80dB
6) IF Rejection 100dB
7) T.H.D (Mono/Stereo) 0.3%/0.5%
8) Frequency Response (−3dB) .... 20Hz~12kHz
9) Stereo Separation 100Hz/1kHz/10kHz 35dB/40dB/33dB

2. MW

1) Tuning Range .... 522kHz~1611kHz
2) Intermediate Frequency 450kHz
3) Usable Sensitivity 594kHz, 1008kHz, 1404kHz 50dB
4) Image Rejection 40dB
5) IF Rejection 50dB
6) Selectivity 30dB
7) Signal-to-noise Ratio 45dB
8) Distortion 1%
9) Frequency Response (−6dB) .... 80Hz~2300Hz

3. LW

1)	Tuning Range	146kHz~290kHz
2)	Intermediate Frequency	450kHz
3)	Usable Sensitivity 164kHz, 200kHz, 254kHz	60dB
4)	Image Rejection	35dB
3)	Usable Sensitivity 164kHz, 200kHz, 254kHz	60dB
4)	Image Rejection	35dB
5)	IF Rejection	50dB
6)	Selectivity	30dB
7)	Signal-to-noise Ratio	40dB
8)	Distortion	2%
9)	Frequency Response (−6dB)	80Hz~2300Hz

NOTE: Specifications are subject to change without notice for improvement.

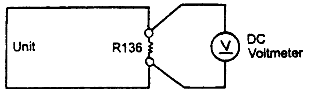
ADJUSTMENTS

This set has been aligned at the factory and normally will not require further adjustment. As a result, it is not recommended that any attempt is made to modificate any circuit if any parts are replaced or if anyone tampers with the adjustment, realignment may be necessary.

1. FM IF ADJUSTMENT

1) As The Distortion Meter Is Not Used

DC Voltmeter ······ Connect to both side of the R136.

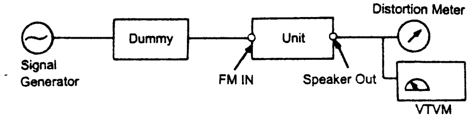

Unit
R136
V
DC
Voltmeter

Step	Frequency	Adjust For	Adjustment
1	98MHz	DC 0V±10mV	T101
2	Repeat step 1 several times.		

Figure 1. FM IF Adjustment Connection Diagram

2) As The Distortion Meter Is Used

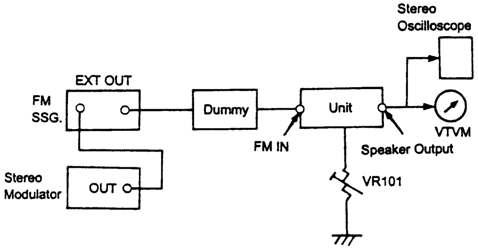
Signal Generator	Connect to FM Antenna Terminal through the dummy. (Adjust for the output of the generator to be 60dB at this time.)
VTVM	Connect to the speaker terminal. (Adjust for the indication of the VTVM to be 2V with volume.)
Distortion Meter	Connect to the speaker terminal. (Rotate the T101 until the distortion meter is less than 0.3%.)


Distortion Meter
Dummy
Unit
Signal Generator
FM IN
Speaker Out
VTVM

Frequency	Adjust For	Adjustment
98MHz	Minimum T.H.D.	T101

Figure 2. FM IF Adjustment Connection Diagram

2. FM MPX ADJUSTMENT

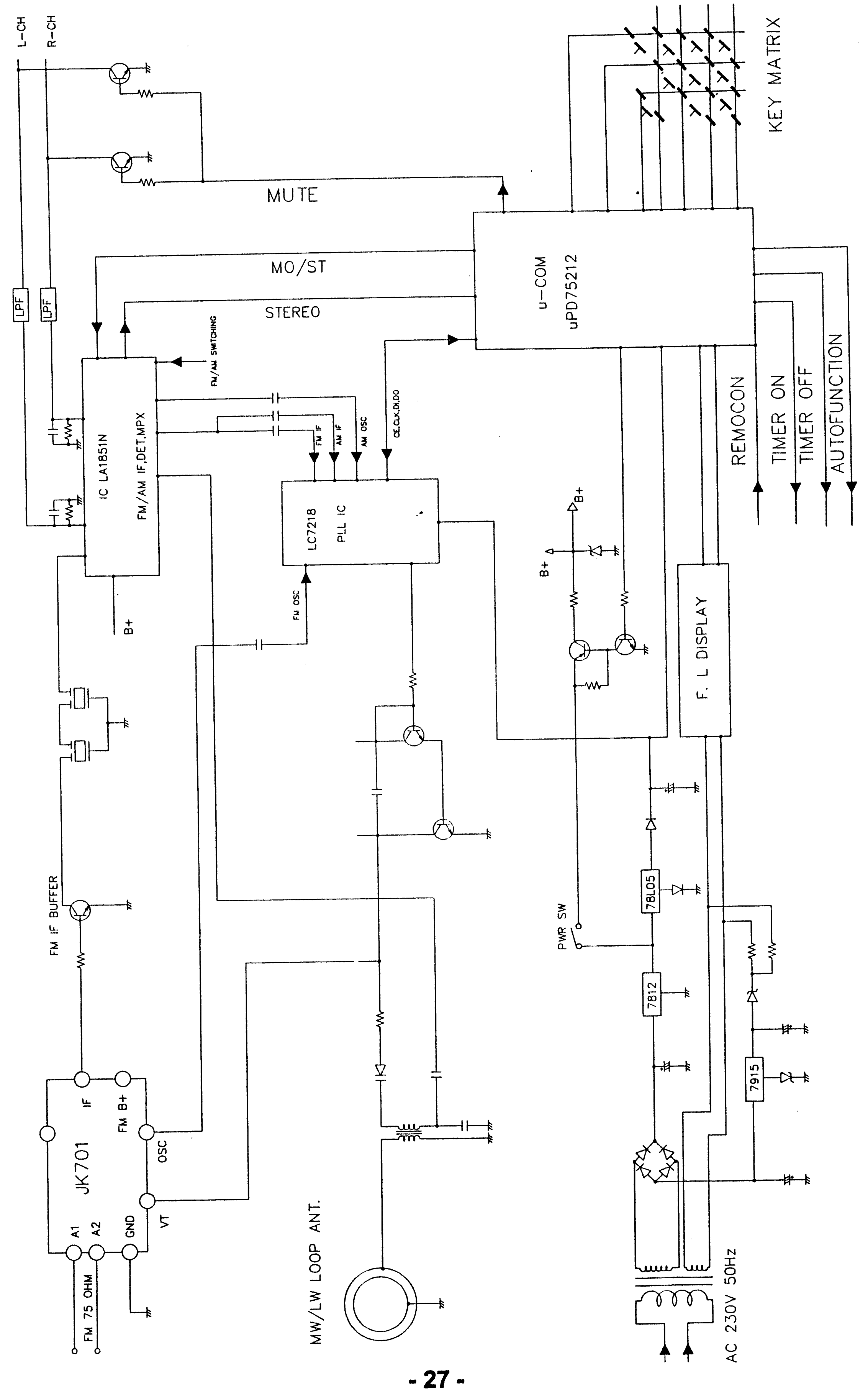

Stereo Oscilloscope
EXT OUT
FM SSG.
Dummy
Unit
VTVM
FM IN
Speaker Output
Stereo Modulator
OUT
VR101

Pilot Signal	Adjust For	Adjustment
ON	Difference of R and L must be maximum.	VR101

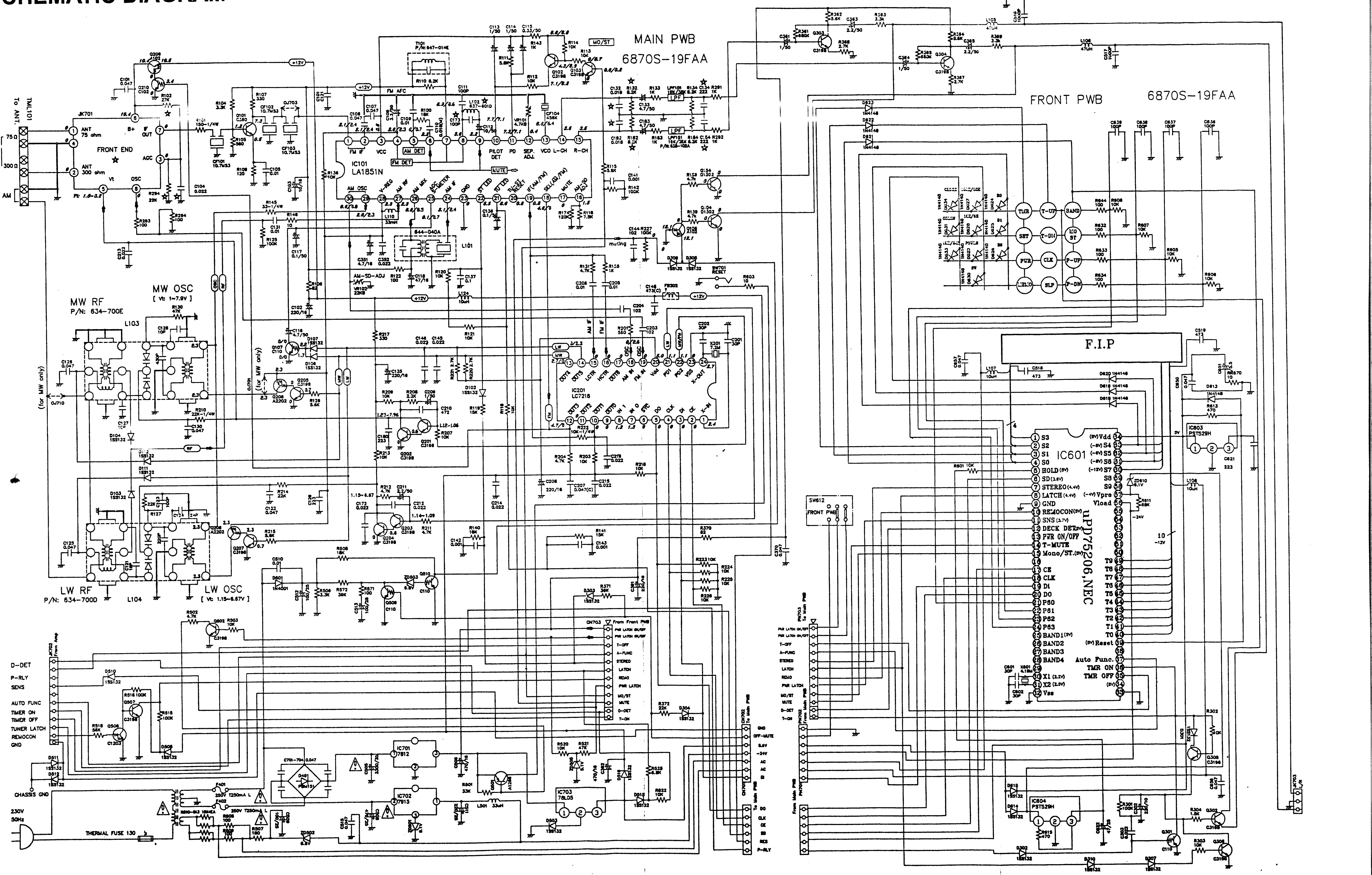
NOTE: In case of adjusting the stereo separation, if input is L (or R) channel, R (or L) channel must be maximum.

Figure 3. FM MPX Adjustment Connection Diagram

BLOCK DIAGRAM

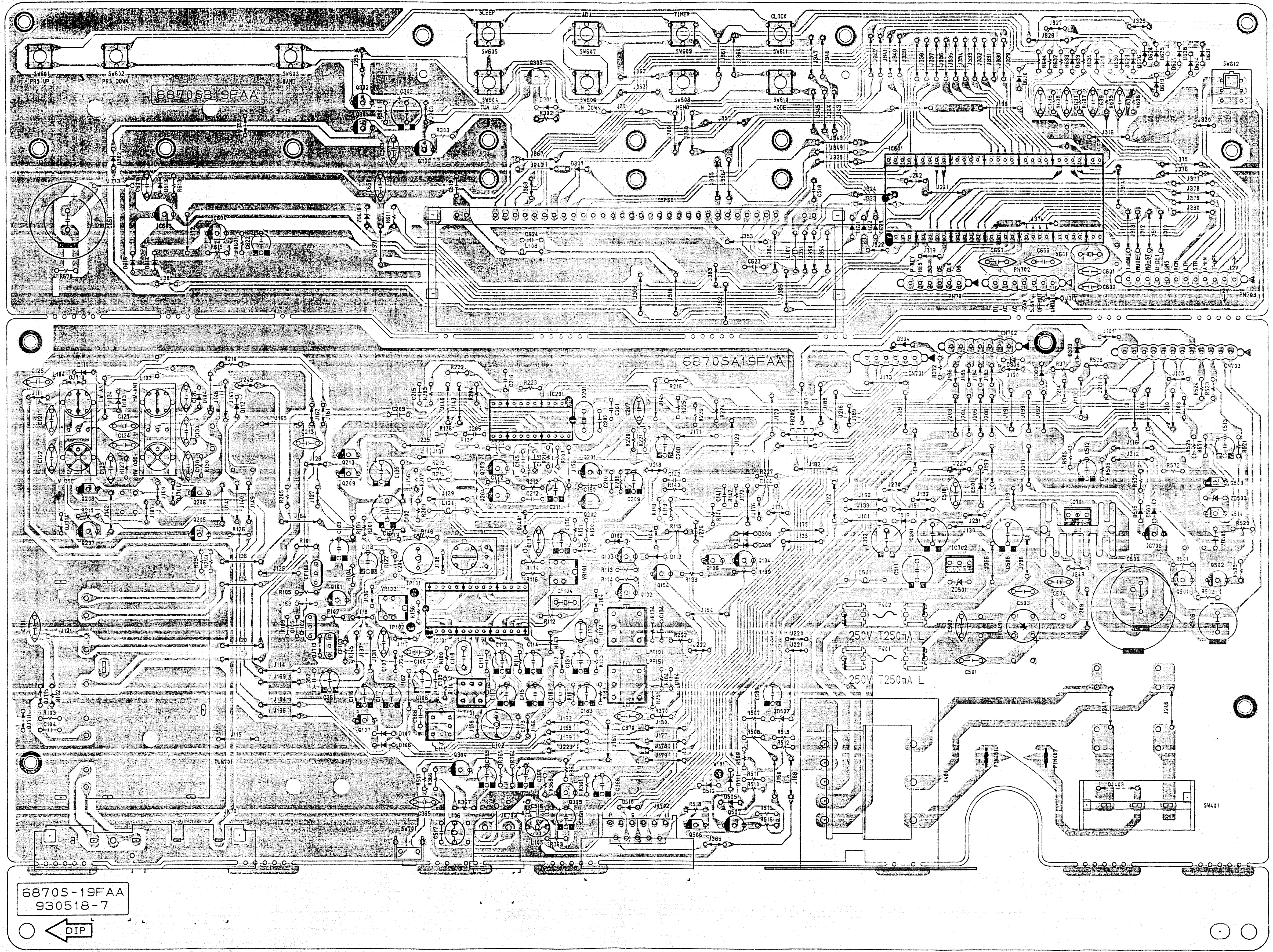

L-CH
R-CH
LPF
LPF
MUTE
MO/ST
STEREO
FM/AM SWITCHING
IC LA1851N
FM/AM IF,DET,MPX
FM IF
AM IF
AM OSC
CE,CLK,DI,DO
LC7218
PLL IC
FM OSC
u-COM
uPD75212
KEY MATRIX
REMOCON
TIMER ON
TIMER OFF
AUTOFUNCTION
B+
B+
B+
F. L DISPLAY
FM IF BUFFER
PWR SW
78L05
7812
7915
JK701
IF
FM B+
OSC
VT
GND
A1
A2
FM 75 OHM
MW/LW LOOP ANT.
AC 230V 50Hz

SCHEMATIC DIAGRAM

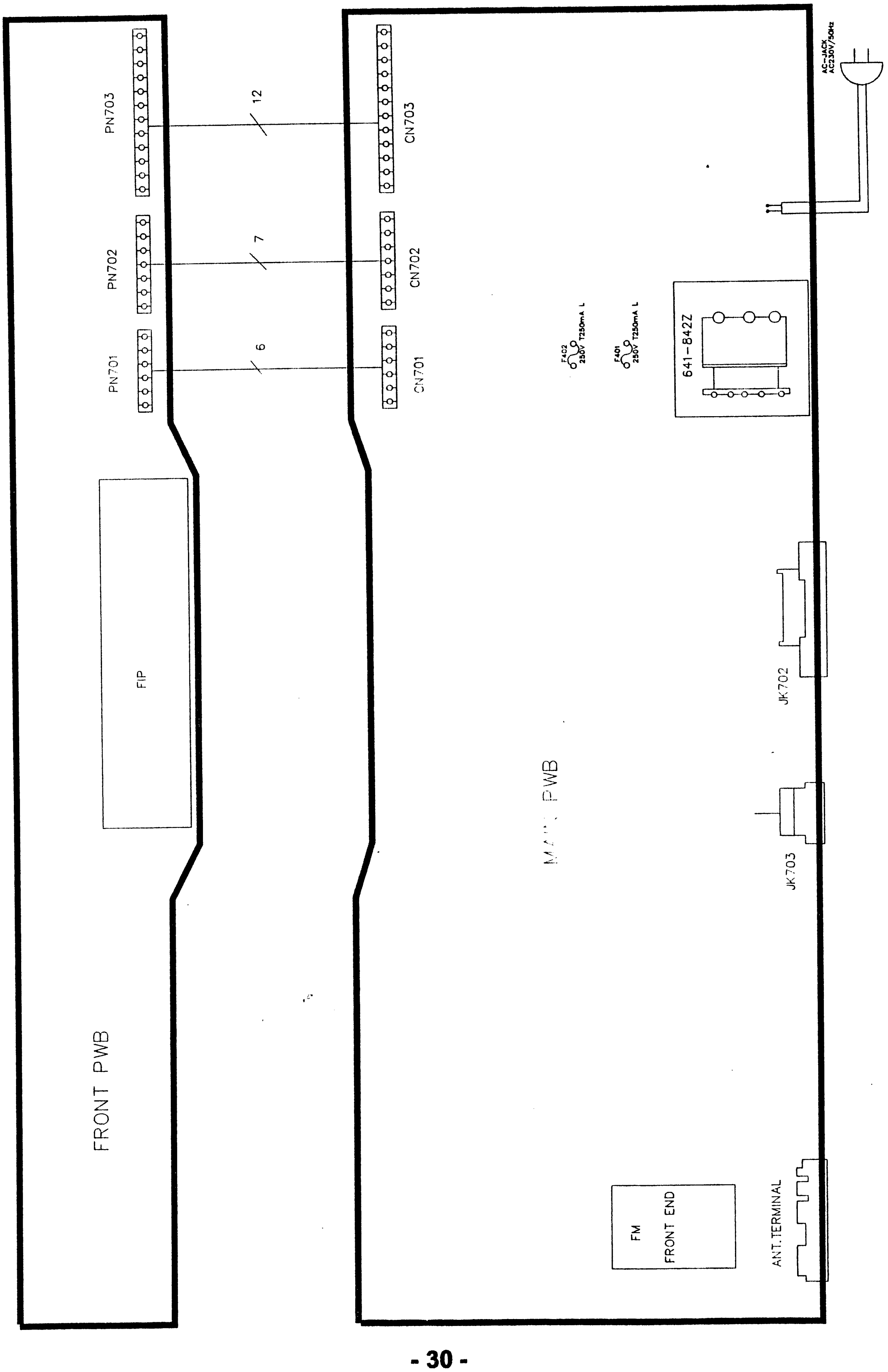

MAIN PWB
6870S-19FAA
FRONT PWB
6870S-19FAA
To ANT. TML101
FM
75Ω
300Ω
AM
JK701
FRONT END
ANT 75 ohm
ANT 300 ohm
IC101
LA1851N
FM IF
VCC
AM DET
FM DET
PILOT DET
PD
SEP. ADJ.
VCO
L-CH
R-CH
MUTE
MO/ST
LPF
muting
RESET
IC201
LC7218
F.I.P
IC601
uPD75206,NEC
MW RF
P/N: 634-700E
MW OSC
[Vt: 1-7.9V]
L103
LW RF
P/N: 634-700D
LW OSC
[Vt: 1.15-6.67V]
L104
(for MW only)
TUR
T-UP
BAND
SET
T-DN
LO ST
PWR
CLK
P-UP
SLP
P-DN
IC603
PST529H
IC604
PST529H
IC701
7812
IC702
7915
IC703
78L05
SW612
FRONT PWB
CN703
From Front PWB
D-DET
P-RLY
SENS
AUTO FUNC
TIMER ON
TIMER OFF
TUNER LATCH
REMOCON
GND
CHASSIS GND
230V
50Hz
THERMAL FUSE 130
JK702
From Amp
S3
S2
S1
S0
HOLD
SD
STEREO
LATCH
GND
REMOCON
SNS
DECK DET
PWR ON/OFF
T-MUTE
Mono/ST.
CE
CLK
DI
DO
P60
P61
P62
P63
BAND1
BAND2
BAND3
BAND4
X1
X2
Vss
Vdd
S4
S5
S6
S7
S8
S9
Vpre
Vload
T9
T8
T7
T6
T5
T4
T3
T2
T1
T0
Reset
Auto Func.
TMR ON
TMR OFF

NOTES: 1. Resistance values are indicated in ohms unless otherwise specified (K=1,000, M=1,000,000)
2. Capacitance values are shown in microfarads unless otherwise (P=MICRO-MICRO FARADS)

PCB LAYOUT

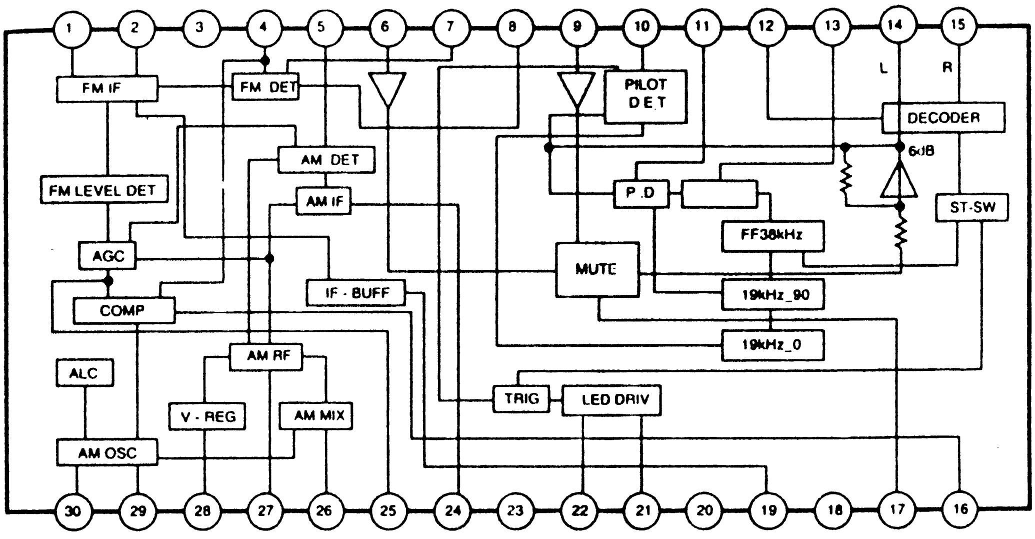

SLEEP
ADJ
TIMER
CLOCK
SW601
PRS UP
SW602
PRS DOWN
SW603
BAND
SW604
TUN UP
SW605
SW606
TUN DOWN
SW607
SW608
MEMO
SW609
SW610
MODE
SW611
SW612
6870SB19FAA
IC601
PN701
PN702
PN703
6870SA19FAA
CN701
CN702
CN703
IC201
IC701
IC702
IC703
F401
F402
250V T250mA L
250V T250mA L
SW431
TUN701
6870S-19FAA
930518-7
DIP

WIRING DIAGRAM

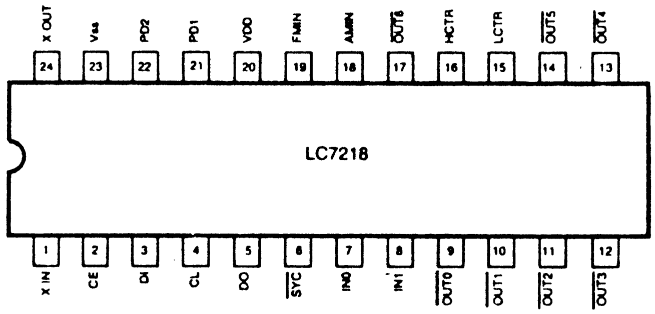

PN703
PN702
PN701
12
7
6
CN703
CN702
CN701
F402 250V T250mA L
F401 250V T250mA L
641-842Z
AC-JACK AC230V/50Hz
FIP
FRONT PWB
MAIN PWB
JK702
JK703
FM FRONT END
ANT.TERMINAL

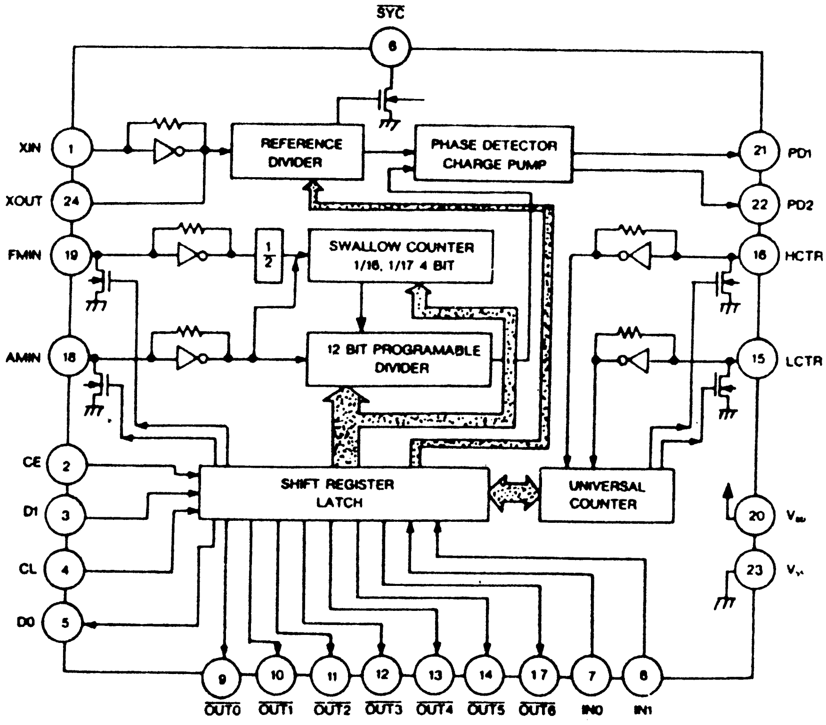
INTERNAL BLOCK DIAGRAM OF ICs

IC101 LA1851N

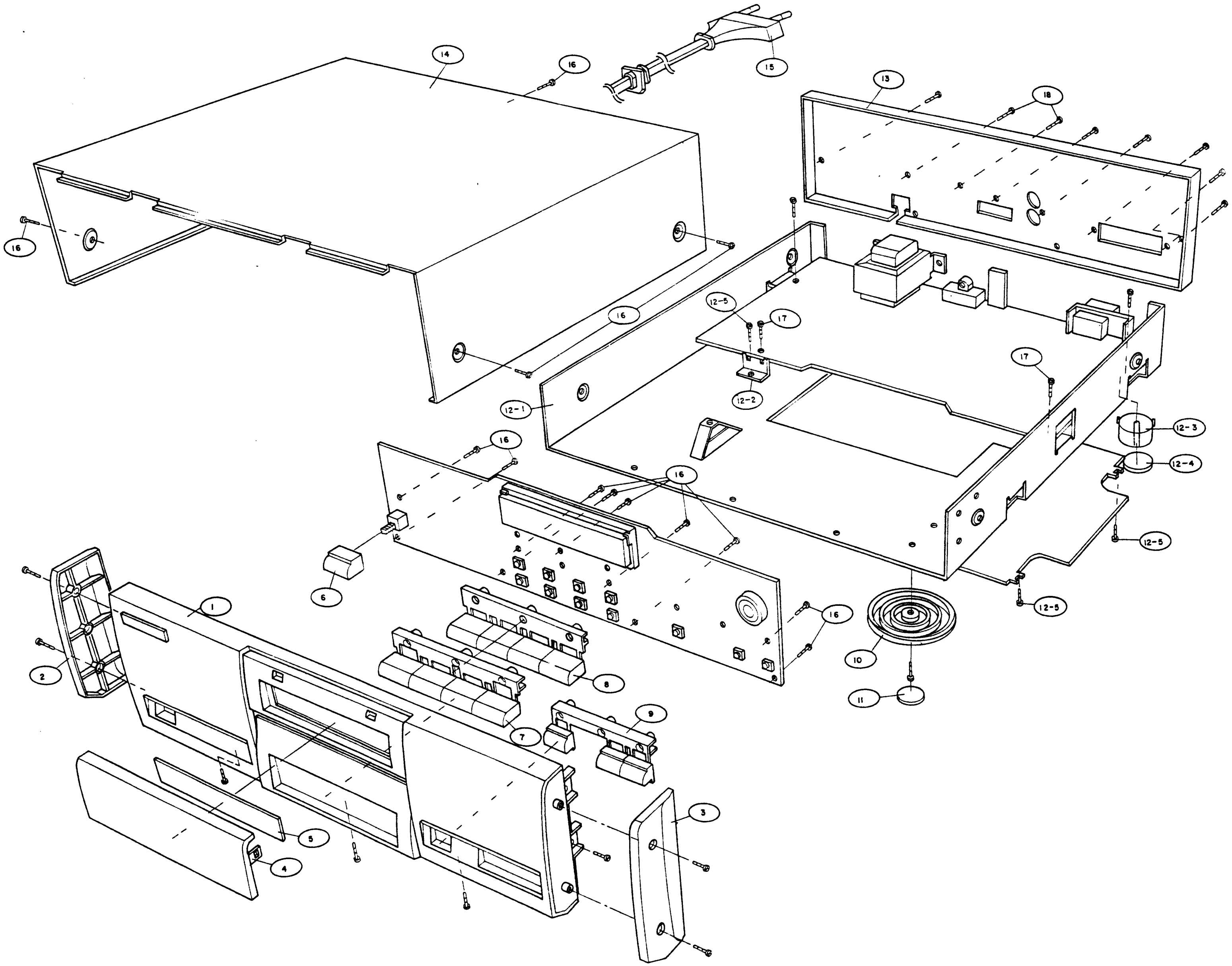

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
FM IF
FM DET
PILOT DET
L
R
DECODER
6dB
AM DET
AM IF
FM LEVEL DET
P.D
ST-SW
FF38kHz
AGC
MUTE
IF - BUFF
COMP
19kHz_90
19kHz_0
AM RF
ALC
TRIG
LED DRIV
V - REG
AM MIX
AM OSC
30
29
28
27
26
25
24
23
22
21
20
19
18
17
16

IC201 LC7218


X OUT
Vss
PD2
PD1
VDD
FMIN
AMIN
OUT6
HCTR
LCTR
OUT5
OUT4
24
23
22
21
20
19
18
17
16
15
14
13
LC7218
1
2
3
4
5
6
7
8
9
10
11
12
X IN
CE
DI
CL
DO
SYC
IN0
IN1
OUT0
OUT1
OUT2
OUT3


SYC
6
XIN
1
XOUT
24
FMIN
19
AMIN
18
CE
2
DI
3
CL
4
DO
5
REFERENCE DIVIDER
PHASE DETECTOR CHARGE PUMP
21
PD1
22
PD2
16
HCTR
15
LCTR
1/2
SWALLOW COUNTER 1/16, 1/17 4 BIT
12 BIT PROGRAMABLE DIVIDER
SHIFT REGISTER LATCH
UNIVERSAL COUNTER
20
VDD
23
VSS
9
10
11
12
13
14
17
7
8
OUT0
OUT1
OUT2
OUT3
OUT4
OUT5
OUT6
IN0
IN1

EXPLODED VIEW/PARTS LIST



REF. NO.	PART NO.	DESCRIPTION	Q'TY
1	3720S-0042B	Panel, Front	1
2	246-518B	Decoration, Side (B) – L	1
3	246-519B	Decoration Side (B) – R	1
4	236-943A	Window, Display	1
5	231-237A	Sheet, Filter	1
6	4940S-0216A	Knob, Push	1
7	4940S-0222A	Knob, Tuning	1
8	4940S-0223A	Knob, Preset	1
9	4940S-0224A	Knob, Tuning	1
10	265-021A	Foot, Front	2
11	472-190C	Felt	2
12	3141SU0018B	Chassis Assembly, Main	1
12-1	3140S-0018B	Chassis, Main	1
12-2	3140S-0505A	Bracket, PCB	1
12-3	265-004A	Foot, Rubber	2
12-4	472-610F	Felt	2
12-5	1TRL0302016	Screw, 3x6	2
13	3720S-0057B	Panel, Back	1
14	213-533A	Cabinet, Top	1
15	681-005A	Cord, Power	1
16	353-025C	Screw, Special 3x10	26
17	1TRL0302018	Screw, 3x6	10
18	353-070C	Screw, 4x12	2

[REPLACEMENT PARTS LIST] PAGE : 1

RUN-DATE : 93.05.26

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
			1TRL0302016	BRAIZER HEAD TA SCREW + 2 CUT	D 3.0 L 6.0 MSWR3/(BK)	
			213-533A	CABINET	TOP (FT-532 BG1)	
			231-237A	SHEET	FILTER (FT-532 BG1)	
			236-943A	WINDOW	DISPLAY (FT-532L BG1)	
			246-518B	DECORATION	SIDE(B)-L (FT-532L BU2)	
			246-519B	DECORATION	SIDE(B)-R (FT-532L BU2)	
			265-021A	FOOT	FRONT (FA-532 BG1)	
			265-022A	FOOT	RUBBER (FA-532 BG1)	
			3140S-0018B	CHASSIS	MAIN (FT-532)	
			3141SU0018B	CHASSIS ASSY	MAIN (FT-532)	
			324-091A	HOLDER	FIP (FT/FH-909 KW1)	
			353-070C	SCREW	* TAPPING,WASHER 4X12 FBK	
			3720S-0042B	PANEL	FRONT (FT-532L BU2)	
			3720S-0057B	PANEL	BACK (FT-532L BU2)	
			3890S-C035G	BOX	(FT-532L BU2)	
			472-190C	FELT		
			4810S-0505A	BRACKET	PCB (FT-532 BG1)	
			4940S-0216A	KNOB	PUSH(FA-532 BG1)	
			4940S-0222A	KNOB	TUNING (FT-532L BG1)	
			4940S-0223A	KNOB	PRESET(FT-532L BG1)	
			4940S-0224A	KNOB	TUNING (FT-532L BG1)	
			563-655A	CONNECTOR ASSY	COAX, 300MM	
			563-703A	CONNECTOR ASSY	CGF1311-0101X2 2468#24 500SMK	
			564-017E	PLUG CONTACT CORD,PHONE	700M/M NON UL	
			586-001C	FUSE HOLDER	PIN-T 5X20 KS (S)	
			632-218E	COIL ANTENNA	COIL ANT LOOT MW(21D) W/O LUG	
			681-005A	CORD POWER	681-004F+B172 KDK	
		CF101	616-010B	FILTER CERAMIC	SFE10.7MS3GH(RD) 180K (S)	
		CF102	616-010B	FILTER CERAMIC	SFE10.7MS3GH(RD) 180K (S)	
		CF103	616-010B	FILTER CERAMIC	SFE10.7MS3GH(RD) 180K (S)	
		CF104	616-020L	FILTER CERAMIC	RESO NATOR,CSB456F15	
		C101	0CG4730H565	CAPACITOR SEMI CERAMIC	0.047M 25V K X TS	
		C102	0CE2276F618	CAPACITOR,ELECTROLYTIC	220M SMS 16V M FM5 TP(5)	
		C103	0CE1076D618	CAPACITOR,ELECTROLYTIC	100M SMS 10V M FM5 TP(5)	
		C104	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C105	0CN1030F678	CAPACITOR TUBULA(HIGH DIELE)	0.01M 16V M Y TA26	
		C106	0CG4730H565	CAPACITOR SEMI CERAMIC	0.047M 25V K X TS	
		C107	0CG4730H565	CAPACITOR SEMI CERAMIC	0.047M 25V K X TS	
		C108	0CE3356K618	CAPACITOR,ELECTROLYTIC	3.3M SMS 50V M FL TP(5)	
		C109	0CN1020K518	CAPACITOR TUBULA(HIGH DIELE)	1000P 50V K B TA26	
		C110	0CQ1831N409	CAPACITOR POLYESTER(MYLAR)	0.018U 100V J POLY TP	
		C111	0CN1010K518	CAPACITOR TUBULA(HIGH DIELE)	100P 50V K B TA26	
		C112	0CE1066H618	CAPACITOR,ELECTROLYTIC	10M SMS 25V M FM5 TP(5)	
		C113	0CE1056K618	CAPACITOR,ELECTROLYTIC	1.0M SMS 50V M FL TP(5)	
		C114	0CE1056K618	CAPACITOR,ELECTROLYTIC	1.0M SMS 50V M FL TP(5)	
		C115	0CE3346K618	CAPACITOR,ELECTROLYTIC	0.33M SMS 50V M FL TP(5)	
		C116	0CE4756K618	CAPACITOR,ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C117	0CE1046K618	CAPACITOR,ELECTROLYTIC	0.1M SMS 50V M FL TP(5)	
		C118	0CE4766F618	CAPACITOR,ELECTROLYTIC	47M SMS 16V M FL TP(5)	
		C121	0CC1800K505	CAPACITOR,CERAMIC(TEMP COMP)	18P 50V K SL TP	

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S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		C122	0CG4730H565	CAPACITOR SEMI CERAMIC	0.047M 25V K X TS	
		C123	0CC1010K415	CAPACITOR,CERAMIC(TEMP COMP)	100P 50V J NPO TS	
		C124	0CC2400K415	CAPACITOR CERAMIC(TEMP COMP)	24P 50V J NPO TP	
		C125	0CG4730H565	CAPACITOR SEMI CERAMIC	0.047M 25V K X TS	
		C126	0CG4730H565	CAPACITOR SEMI CERAMIC	0.047M 25V K X TS	
		C127	0CC1000K115	CAPACITOR,CERAMIC(TEMP COMP)	10P 50V D NPO TS	
		C128	0CC1500K415	CAPACITOR,CERAMIC(TEMP COMP)	15P 50V J NPO TS	
		C130	0CG4730H565	CAPACITOR SEMI CERAMIC	0.047M 25V K X TS	
		C131	0CN1030F678	CAPACITOR TUBULA(HIGH DIELE)	0.01M 16V M Y TA26	
		C133	0CE4756K618	CAPACITOR,ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C134	0CN2220F668	CAPACITOR TUBULA(HIGH DIELE)	2200P 16V M X TA26	
		C135	0CE4766F618	CAPACITOR,ELECTROLYTIC	47M SMS 16V M FL TP(5)	
		C136	0CE1046K618	CAPACITOR,ELECTROLYTIC	0.1M SMS 50V M FL TP(5)	
		C137	0CK1040K945	CAPACITOR,CERAMIC(HIGH DIELEC)	0.1UF 50V Z F TS	
		C141	0CN1020K518	CAPACITOR TUBULA(HIGH DIELE)	1000P 50V K B TA26	
		C142	0CN1020K518	CAPACITOR TUBULA(HIGH DIELE)	1000P 50V K B TA26	
		C144	0CN1020K518	CAPACITOR TUBULA(HIGH DIELE)	1000P 50V K B TA26	
		C145	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C146	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C172	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C173	0CN1010K518	CAPACITOR TUBULA(HIGH DIELE)	100P 50V K B TA26	
		C180	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C183	0CE4756K618	CAPACITOR,ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C184	0CN2220F668	CAPACITOR TUBULA(HIGH DIELE)	2200P 16V M X TA26	
		C201	0CX3000K408	CAPACITOR TUBULA(T.C)	30P 50V J SL TA26	
		C202	0CX3000K408	CAPACITOR TUBULA(T.C)	30P 50V J SL TA26	
		C203	0CN1020K518	CAPACITOR TUBULA(HIGH DIELE)	1000P 50V K B TA26	
		C204	0CN1020K518	CAPACITOR TUBULA(HIGH DIELE)	1000P 50V K B TA26	
		C205	0CN1030F678	CAPACITOR TUBULA(HIGH DIELE)	0.01M 16V M Y TA26	
		C206	0CN1030F678	CAPACITOR TUBULA(HIGH DIELE)	0.01M 16V M Y TA26	
		C207	0CG4730H565	CAPACITOR SEMI CERAMIC	0.047M 25V K X TS	
		C208	0CE1076D618	CAPACITOR,ELECTROLYTIC	100M SMS 10V M FM5 TP(5)	
		C209	0CE1056K618	CAPACITOR,ELECTROLYTIC	1.0M SMS 50V M FL TP(5)	
		C210	0CN4720F668	CAPACITOR TUBULA(HIGH DIELE)	4700P 16V M X TA26	
		C211	0CE2256K618	CAPACITOR,ELECTROLYTIC	2.2M SMS 50V M FL TP(5)	
		C212	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C213	0CK2230K945	CAPACITOR CERAMIC(HIGH DIELE)	0.022M 50V Z F TS	
		C215	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C216	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C302	0CE2276F618	CAPACITOR,ELECTROLYTIC	220M SMS 16V M FM5 TP(5)	
		C303	0CK2230K945	CAPACITOR CERAMIC(HIGH DIELE)	0.022M 50V Z F TS	
		C351	0CE4756K618	CAPACITOR,ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C352	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C365	0CK4730K945	CAPACITOR CERAMIC(HIGH DIELE)	0.047U 50V Z F TS	
		C366	0CE1056K618	CAPACITOR,ELECTROLYTIC	1.0M SMS 50V M FL TP(5)	
		C367	0CE1056K618	CAPACITOR,ELECTROLYTIC	1.0M SMS 50V M FL TP(5)	
		C368	0CE2256K618	CAPACITOR,ELECTROLYTIC	2.2M SMS 50V M FL TP(5)	
		C369	0CE2256K618	CAPACITOR,ELECTROLYTIC	2.2M SMS 50V M FL TP(5)	
		C370	0CK4730K945	CAPACITOR CERAMIC(HIGH DIELE)	0.047U 50V Z F TS	
		C391	0CE2276F618	CAPACITOR,ELECTROLYTIC	220M SMS 16V M FM5 TP(5)	

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S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		C392	0CE477CF618	CAPACITOR,ELECTROLYTIC	470UF SHL 16V M FL TP5	
		C501	0CK4730K945	CAPACITOR CERAMIC(HIGH DIELE)	0.047U 50V Z F TS	
		C502	0CK4730K945	CAPACITOR CERAMIC(HIGH DIELE)	0.047U 50V Z F TS	
		C503	0CK4730K945	CAPACITOR CERAMIC(HIGH DIELE)	0.047U 50V Z F TS	
		C504	0CK4730K945	CAPACITOR CERAMIC(HIGH DIELE)	0.047U 50V Z F TS	
		C505	0CE3381J640	CAPACITOR,ELECTROLYTIC	3300M SM 35V M FM10	
		C506	0CE4776H630	CAPACITOR,ELECTROLYTIC	470M SMS 25V M FM5	
		C508	0CE4776J630	CAPACITOR,ELECTROLYTIC	470M SMS 35V M FM5	
		C509	0CE1076H618	CAPACITOR,ELECTROLYTIC	100M SMS 25V M FM5 TP(5)	
		C510	0CK1030K945	CAPACITOR,CERAMIC(HIGH DIELEC)	0.01UF 50V Z F TS	
		C511	0CE2276H618	CAPACITOR,ELECTROLYTIC	220M SMS 25V FM5 TP(5)	
		C512	0CE1076H618	CAPACITOR,ELECTROLYTIC	100M SMS 25V M FM5 TP(5)	
		C513	0CE1076H618	CAPACITOR,ELECTROLYTIC	100M SMS 25V M FM5 TP(5)	
		C516	0CN1020K518	CAPACITOR TUBULA(HIGH DIELE)	1000P 50V K B TA26	
		C517	0CN1020K518	CAPACITOR TUBULA(HIGH DIELE)	1000P 50V K B TA26	
		C518	0CN4730K948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.047UF 50V Z F TA26	
		C519	0CN4730K948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.047UF 50V Z F TA26	
		C601	0CC3000K415	CAPACITOR CERAMIC(TEMP COMP)	30P 50V J NPO TP	
		C602	0CC3000K415	CAPACITOR CERAMIC(TEMP COMP)	30P 50V J NPO TP	
		C621	0CK2230K945	CAPACITOR CERAMIC(HIGH DIELE)	0.022M 50V Z F TS	
		C622	0CE4766F618	CAPACITOR,ELECTROLYTIC	47M SMS 16V M FL TP(5)	
		C623	0CN4730K948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.047UF 50V Z F TA26	
		C624	0CN4730K948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.047UF 50V Z F TA26	
		C636	0CC1010K415	CAPACITOR,CERAMIC(TEMP COMP)	100P 50V J NPO TS	
		C637	0CC1010K415	CAPACITOR,CERAMIC(TEMP COMP)	100P 50V J NPO TS	
		C638	0CC1010K415	CAPACITOR,CERAMIC(TEMP COMP)	100P 50V J NPO TS	
		C639	0CC1010K415	CAPACITOR,CERAMIC(TEMP COMP)	100P 50V J NPO TS	
		C650	0CK4730K945	CAPACITOR CERAMIC(HIGH DIELE)	0.047U 50V Z F TS	
		C651	624-034G	CAPACITOR ELECTROLYTIC DOIB	GOLD EECF5R5U105 1.0F 5.5V	
		C656	0CK4730K945	CAPACITOR CERAMIC(HIGH DIELE)	0.047U 50V Z F TS	
		C657	0CK4730K945	CAPACITOR CERAMIC(HIGH DIELE)	0.047U 50V Z F TS	
		DJ242	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		DSP601	659-250G	DISPLAY	10BT-98GK,DIGITRON,FUTABA	
		D102	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D103	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D104	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D106	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D107	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D111	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D112	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D113	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D301	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D302	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D303	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D304	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D305	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D306	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D491	0DD151000FA	DIODE	PBM151,BRID,SILITER,FORMING	
		D501	0DD400109DA	DIODE	1N4001,RECT,ROHM,TP	
		D503	0DD132009AA	DIODE	1SS132 DETECT,SW TP	

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		D505	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D510	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D511	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D512	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D515	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D516	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D613	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D614	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D615	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D618	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D619	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D620	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D621	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D622	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D623	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D625	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D631	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D633	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		FB202	631T603F	COIL ANTENNA	4EAD CORE,BF45TS-2,6X6X0.8 TDK	
		FOR	255-561A	HEAT SINK		
		FT-532	6871S-19FAA	PWB ASSY	FT-532 PWB ASSY	
		F401	0FT2500B513	FUSE TIME LAG	0.25A 250V 5.2X20 PT/G SMK	
		F402	0FT2500B513	FUSE TIME LAG	0.25A 250V 5.2X20 PT/G SMK	
		IC101	0ISA185100A	IC, SANYO	LA1851N IF+MPX FOR DTS SANYO	
		IC201	0ISA721800A	IC,SANYO	LC7218 PLL,SANYO	
		IC601	0INE752120A	IC,NEC	UPD7521ACW-A32 MICOM(T),NEC	
		IC603	0IMT529009A	IC,MITSUMI	PST529H-2 TP 3.1V,MITSUMI	
		IC604	0IMT529009A	IC,MITSUMI	PST529H-2 TP 3.1V,MITSUMI	
		IC701	0IGS781200C	IC, GOLDSTAR ELECTRON	GL7812 12V 1A REGULATOR,G/S	
		IC702	0INS791500A	IC, NATIONAL SEMICONDUCTOR	LM7915CT (15V REG 1A),N/S	
		IC703	0INS780500B	IC,NATIONAL SEMICONDUCTOR	LM78L05ACZ VOLTAGE REGULATOR	
		JK701	561-100G	CONNECTOR	TERMIANL ANT SP-035A	
		JK702	561-904K	CONNECTOR	WAFER,SMK CFG1111-0101	
		JK703	576-002B	JACK RCA	JACK,BLOCK S-436P-2P(WH/RD)(S)	
		LPF101	638-102A	COIL TRAP FM	COIL,MPX FILTER 19K, 38K (S)	
		ZD610	0DZ910009EE	DIODE,ZENER	MTZ9.1C-T-77 ROHM-K	
		LPF151	638-102A	COIL TRAP FM	COIL,MPX FILTER 19K, 38K (S)	
		L101	644-040A	TRANS	PCFMA-157, MW IF TOKO	
		L102	637-601D	INDUCTOR	INDUCTOR, F 20.8MH (S)	
		L103	634-700E	COIL OSCILLATOR	RBW07VB-K5004 MW RF OSC TOKO	
		L104	634-700D	COIL OSCILLATOR	RBW07VB-K0003 LW RF OSC TOKO	
		L105	637-604A	INDUCTOR	INDUCTOR,F 47UH(2CORE) (S)	
		L106	637-604A	INDUCTOR	INDUCTOR,F 47UH(2CORE) (S)	
		L107	0LA0102K018	INDUCTOR AXIAL LEAD	10M K 2.3X3.4 L5 TP	
		L108	0LA0102K018	INDUCTOR AXIAL LEAD	10M K 2.3X3.4 L5 TP	
		L110	637N010A	INDUCTOR	RC-875 (0732-000-017) 393K	
		L124	0LA0102K018	INDUCTOR AXIAL LEAD	10M K 2.3X3.4 L5 TP	
		L501	0LA0332K018	INDUCTOR AXIAL LEAD	33M K 2.3X3.4 L5 TP	
		PIN401	561-910C	CONNECTOR	TERMINAL SEMKO PCB-ROCKING	
		PIN402	561-910C	CONNECTOR	TERMINAL SEMKO PCB-ROCKING	

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		Q101	0TR319209AA	TRANSISTOR	KTC3192-0 TP,KEC(KTC380TM-0)	
		Q102	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q103	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q104	0TR287809AA	TRANSISTOR	2SC2878-B-TPE2 TO-92 T/B	
		Q106	0TR102009AE	TRANSISTOR	KRA102M TP,KEC(KRA2202)	
		Q107	0TR110009AE	TRANSISTOR	KRC110M TP,KEC(KRC1210)	
		Q154	0TR287809AA	TRANSISTOR	2SC2878-B-TPE2 TO-92 T/B	
		Q201	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q202	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q203	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q204	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q205	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q206	0TR102009AE	TRANSISTOR	KRA102M TP,KEC(KRA2202)	
		Q207	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q208	0TR102009AE	TRANSISTOR	KRA102M TP,KEC(KRA2202)	
		Q209	0TR102009AE	TRANSISTOR	KRA102M TP,KEC(KRA2202)	
		Q210	0TR110009AE	TRANSISTOR	KRC110M TP,KEC(KRC1210)	
		Q301	0TR110009AE	TRANSISTOR	KRC110M TP,KEC(KRC1210)	
		Q302	0TR110009AE	TRANSISTOR	KRC110M TP,KEC(KRC1210)	
		Q303	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q304	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q305	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q306	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q501	0TR126609AA	TRANSISTOR	KTA1266-TP-Y (KTA1015) KEC	
		Q502	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q506	0TR103009AE	TRANSISTOR	KRC103M TP,KEC(KRC1203)	
		Q507	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q509	0TR114009AE	TRANSISTOR	DTC114TS-TP S/W ROHM	
		Q510	0TR114009AE	TRANSISTOR	DTC114TS-TP S/W ROHM	
		R100	0RD1802F608	RESISTOR,FIXED CARBON FILM	18K 1/6W 5 TA26	
		R101	0RD1500F608	RESISTOR,FIXED CARBON FILM	150 1/6W 5 TA26	
		R102	0RD2202F608	RESISTOR,FIXED CARBON FILM	22K 1/6W 5 TA26	
		R103	0RD2702F608	RESISTOR,FIXED CARBON FILM	27K 1/6W 5 TA26	
		R104	0RD3301F608	RESISTOR,FIXED CARBON FILM	3.3K 1/6W 5 TA26	
		R105	0RD5600F608	RESISTOR,FIXED CARBON FILM	560 1/6W 5 TA26	
		R106	0RD0822F608	RESISTOR,FIXED CARBON FILM	82 1/6W 5 TA26	
		R107	0RD3300F608	RESISTOR,FIXED CARBON FILM	330 1/6W 5 TA26	
		R109	0RD1200F608	RESISTOR,FIXED CARBON FILM	120 1/6W 5 TA26	
		R110	0RD8201F608	RESISTOR,FIXED CARBON FILM	8.2K 1/6W 5 TA26	
		R111	0RD5601F608	RESISTOR,FIXED CARBON FILM	5.6K 1/6W 5 TA26	
		R112	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R113	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R114	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R115	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R116	0RD7501F608	RESISTOR,FIXED CARBON FILM	7.5K 1/6W 5 TA26	
		R118	0RD1502F608	RESISTOR,FIXED CARBON FILM	15K 1/6W 5 TA26	
		R119	0RD5601F608	RESISTOR,FIXED CARBON FILM	5.6K 1/6W 5 TA26	
		R120	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R121	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R122	0RD1000F608	RESISTOR,FIXED CARBON FILM	100 1/6W 5 TA26	

[REPLACEMENT PARTS LIST]

P A G E : 6

RUN-DATE : 93.05.26

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		R125	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R126	0RD5601F608	RESISTOR,FIXED CARBON FILM	5.6K 1/6W 5 TA26	
		R127	0RD2202F608	RESISTOR,FIXED CARBON FILM	22K 1/6W 5 TA26	
		R130	0RD4702F608	RESISTOR,FIXED CARBON FILM	47K 1/6W 5 TA26	
		R131	0RD4701F608	RESISTOR,FIXED CARBON FILM	4.7K 1/6W 5 TA26	
		R132	0RD8201F608	RESISTOR,FIXED CARBON FILM	8.2K 1/6W 5 TA26	
		R133	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R134	0RD8201F608	RESISTOR,FIXED CARBON FILM	8.2K 1/6W 5 TA26	
		R136	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R138	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R139	0RD4701F608	RESISTOR,FIXED CARBON FILM	4.7K 1/6W 5 TA26	
		R140	0RD1802F608	RESISTOR,FIXED CARBON FILM	18K 1/6W 5 TA26	
		R141	0RD1502F608	RESISTOR,FIXED CARBON FILM	15K 1/6W 5 TA26	
		R142	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R143	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R145	0RD0102F608	RESISTOR,FIXED CARBON FILM	10 1/6W 5 TA26	
		R146	0RD0102F608	RESISTOR,FIXED CARBON FILM	10 1/6W 5 TA26	
		R174	0RD1203F608	RESISTOR,FIXED CARBON FILM	120K 1/6W 5 TA26	
		R182	0RD8201F608	RESISTOR,FIXED CARBON FILM	8.2K 1/6W 5 TA26	
		R183	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R184	0RD8201F608	RESISTOR,FIXED CARBON FILM	8.2K 1/6W 5 TA26	
		R189	0RD4701F608	RESISTOR,FIXED CARBON FILM	4.7K 1/6W 5 TA26	
		R201	0RD5600F608	RESISTOR,FIXED CARBON FILM	560 1/6W 5 TA26	
		R203	0RD4701F608	RESISTOR,FIXED CARBON FILM	4.7K 1/6W 5 TA26	
		R207	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R208	0RD2201F608	RESISTOR,FIXED CARBON FILM	2.2K 1/6W 5 TA26	
		R209	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R210	0RD2202F608	RESISTOR,FIXED CARBON FILM	22K 1/6W 5 TA26	
		R211	0RD3301F608	RESISTOR,FIXED CARBON FILM	3.3K 1/6W 5 TA26	
		R212	0RD4701F608	RESISTOR,FIXED CARBON FILM	4.7K 1/6W 5 TA26	
		R213	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R214	0RD2202F608	RESISTOR,FIXED CARBON FILM	22K 1/6W 5 TA26	
		R215	0RD5601F608	RESISTOR,FIXED CARBON FILM	5.6K 1/6W 5 TA26	
		R217	0RD3300F608	RESISTOR,FIXED CARBON FILM	330 1/6W 5 TA26	
		R218	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R220	0RD3301F608	RESISTOR,FIXED CARBON FILM	3.3K 1/6W 5 TA26	
		R221	0RD2701F608	RESISTOR,FIXED CARBON FILM	2.7K 1/6W 5 TA26	
		R222	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R223	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R224	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R225	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R226	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R227	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R291	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R292	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R293	0RD1000F608	RESISTOR,FIXED CARBON FILM	100 1/6W 5 TA26	
		R294	0RD1000F608	RESISTOR,FIXED CARBON FILM	100 1/6W 5 TA26	
		R301	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R302	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R303	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	

[REPLACEMENT PARTS LIST]

P A G E : 7

RUN-DATE : 93.05.26

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		R361	0RD6803F608	RESISTOR,FIXED CARBON FILM	680K 1/6W 5 TA26	
		R362	0RD5601F608	RESISTOR,FIXED CARBON FILM	5.6K 1/6W 5 TA26	
		R363	0RD3301F608	RESISTOR,FIXED CARBON FILM	3.3K 1/6W 5 TA26	
		R364	0RD5601F608	RESISTOR,FIXED CARBON FILM	5.6K 1/6W 5 TA26	
		R365	0RD6803F608	RESISTOR,FIXED CARBON FILM	680K 1/6W 5 TA26	
		R366	0RD2701F608	RESISTOR,FIXED CARBON FILM	2.7K 1/6W 5 TA26	
		R367	0RD3301F608	RESISTOR,FIXED CARBON FILM	3.3K 1/6W 5 TA26	
		R368	0RD2701F608	RESISTOR,FIXED CARBON FILM	2.7K 1/6W 5 TA26	
		R370	0RD0822F608	RESISTOR,FIXED CARBON FILM	82 1/6W 5 TA26	
		R371	0RD3902F608	RESISTOR,FIXED CARBON FILM	39K 1/6W 5 TA26	
		R372	0RD2202F608	RESISTOR,FIXED CARBON FILM	22K 1/6W 5 TA26	
		R501	0RD3302F608	RESISTOR,FIXED CARBON FILM	33K 1/6W 5 TA26	
		R502	0RD4701F608	RESISTOR,FIXED CARBON FILM	4.7K 1/6W 5 TA26	
		R503	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R505	0RD1802F608	RESISTOR,FIXED CARBON FILM	18K 1/6W 5 TA26	
		R506	0RD3301F608	RESISTOR,FIXED CARBON FILM	3.3K 1/6W 5 TA26	
		R507	0RD1800F608	RESISTOR,FIXED CARBON FILM	180 1/6W 5 TA26	
		R508	0RD1000F608	RESISTOR,FIXED CARBON FILM	100 1/6W 5 TA26	
		R509	0RD1000F608	RESISTOR,FIXED CARBON FILM	100 1/6W 5 TA26	
		R510	0RD0102F608	RESISTOR,FIXED CARBON FILM	10 1/6W 5 TA26	
		R511	0RD0102F608	RESISTOR,FIXED CARBON FILM	10 1/6W 5 TA26	
		R512	0RD0102F608	RESISTOR,FIXED CARBON FILM	10 1/6W 5 TA26	
		R513	0RD0102F608	RESISTOR,FIXED CARBON FILM	10 1/6W 5 TA26	
		R515	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R516	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R517	0RD0102F608	RESISTOR,FIXED CARBON FILM	10 1/6W 5 TA26	
		R518	0RD5602F608	RESISTOR,FIXED CARBON FILM	56K 1/6W 5 TA26	
		R520	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R521	0RD4702F608	RESISTOR,FIXED CARBON FILM	47K 1/6W 5 TA26	
		R522	0RD1000F608	RESISTOR,FIXED CARBON FILM	100 1/6W 5 TA26	
		R523	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R524	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R526	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R571	0RD1000F608	RESISTOR,FIXED CARBON FILM	100 1/6W 5 TA26	
		R572	0RD3902F608	RESISTOR,FIXED CARBON FILM	39K 1/6W 5 TA26	
		R601	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R605	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R606	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R607	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R608	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R611	0RD6802F608	RESISTOR,FIXED CARBON FILM	68K 1/6W 5 TA26	
		R613	0RD4700F608	RESISTOR,FIXED CARBON FILM	470 1/6W 5 TA26	
		R615	0RD4700F608	RESISTOR,FIXED CARBON FILM	470 1/6W 5 TA26	
		R632	0RD1000F608	RESISTOR,FIXED CARBON FILM	100 1/6W 5 TA26	
		R633	0RD1000F608	RESISTOR,FIXED CARBON FILM	100 1/6W 5 TA26	
		R634	0RD1000F608	RESISTOR,FIXED CARBON FILM	100 1/6W 5 TA26	
		R644	0RD1000F608	RESISTOR,FIXED CARBON FILM	100 1/6W 5 TA26	
		R670	0RD0102F608	RESISTOR,FIXED CARBON FILM	10 1/6W 5 TA26	
		SW601	558T026A	SWITCH SPECIAL	TACT EVQ-114 04M H=4.3 TP	
		SW602	558T026A	SWITCH SPECIAL	TACT EVQ-114 04M H=4.3 TP	

[REPLACEMENT PARTS LIST]

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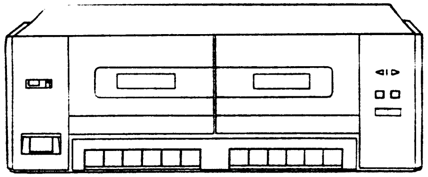
RUN-DATE : 93.05.26

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		SW603	558T026A	SWITCH SPECIAL	TACT EVQ-114 04M H=4.3 TP	
		SW604	558T026A	SWITCH SPECIAL	TACT EVQ-114 04M H=4.3 TP	
		SW605	558T026A	SWITCH SPECIAL	TACT EVQ-114 04M H=4.3 TP	
		SW606	558T026A	SWITCH SPECIAL	TACT EVQ-114 04M H=4.3 TP	
		SW607	558T026A	SWITCH SPECIAL	TACT EVQ-114 04M H=4.3 TP	
		SW608	558T026A	SWITCH SPECIAL	TACT EVQ-114 04M H=4.3 TP	
		SW609	558T026A	SWITCH SPECIAL	TACT EVQ-114 04M H=4.3 TP	
		SW610	558T026A	SWITCH SPECIAL	TACT EVQ-114 04M H=4.3 TP	
		SW611	558T026A	SWITCH SPECIAL	TACT EVQ-114 04M H=4.3 TP	
		SW612	554-635A	SWITCH PUSH	SPPH121AP013	
		SW701	558-026I	SWITCH SPECIAL	TACT JTP-1236A JEIL	
		TUN701	521-026D	TUNER RADIO CAR	FM,FE407-G60 FTZ MITSUMI	
		T101	647-014E	DISCRIMINATOR	DISC FM 7 (LA1851N)	
		T401	641-842Z	TRANS POWER	115/230V 50/60HZ,EQ YS/NY	
		VR101	0RV1472D230	VARIABLE RESISTOR,CARBON FILM	4.7K 6 ST P3 L2.5 5	
		VR102	0RV1223D230	VARIABLE RESISTOR,CARBON FILM	22K 6 ST P3 L2.5 5	
		X201	617T602D	CRYSTAL	7.2MHZ	
		X601	617-602T	CRYSTAL	4.1943MHZ(20PF)	
		ZD501	0DZ910009EE	DIODE,ZENER	MTZ9.1C-T-77 ROHM-K	
		ZD502	0DZ680009AC	DIODE ZENER	UZ6.8BM,0.5W,UNIZON,TP	
		ZD503	0DZ680009AC	DIODE ZENER	UZ6.8BM,0.5W,UNIZON,TP	
		ZD505	0DZ510009HA	DIODE,ZENER	MTZ5.1-B T-77 5.1V TP,ROHM/K	
				*** END OF DATA ***		

DOUBLE CASSETTE DECK



MODEL: C4335

SPECIFICATIONS

1) Tape Speed .... 4.75 cm/sec
2) Wow and Flutter 0.2%
3) Fast Forward and Rewind Time (C-60) 150sec
4) Frequency Response (3 dB Range) .... 125 Hz~10 kHz
5) Signal-to-noise Ratio (Playback/Record) 50dB/45dB
6) Distortion (Playback/Record) 1%/2%
7) Cross Talk 55dB
8) Channel Separation 35dB
9) Erase Ratio 65dB
10) Power Requirement .... AC 230V, 50Hz
11) Dimension (W x H x D) .... 376 x 130 x 320 (mm)
12) Weight (Net) .... 3.8 kg

NOTE: Specifications are subject to change without notice for improvement.

ADJUSTMENTS

This set has been aligned at the factory and normally will not require further adjustment. As a result, it is not recommened that any attempt is made to modificate any circuit. If any parts are replaced or if anyone tampers with the adjustment, realignment may be necessary.

TEST AND ADJUSTMENT POINTS

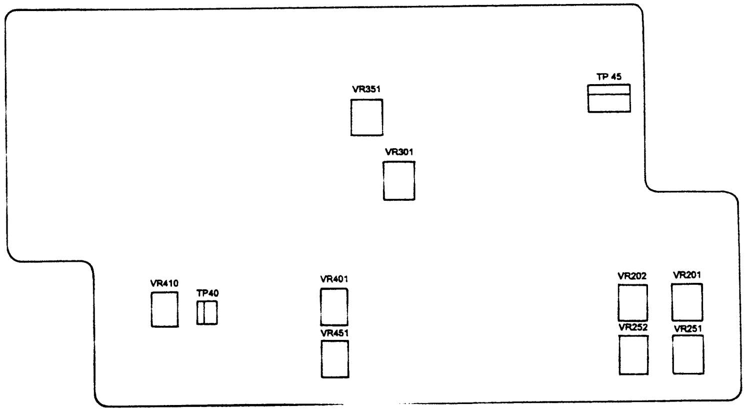

VR351
TP 45
VR301
VR410
TP40
VR401
VR451
VR202
VR201
VR252
VR251

Figure 4. Main P.C. Board View

1. AZIMUTH ADJUSTMENT

Deck	Deck Mode	Test Tape	Test Point	Adjustment	Adjust for
Deck I & II	Playback	MTT-114N	TP45	Head screw	R/L maximum

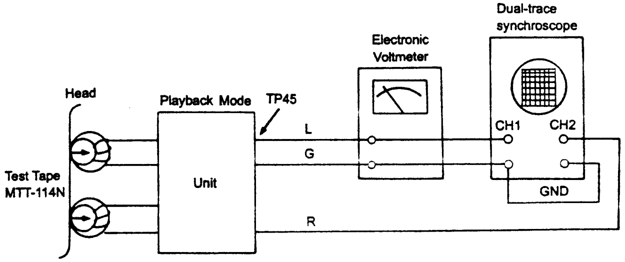

Dual-trace synchroscope
Electronic Voltmeter
Head
Playback Mode
TP45
L
G
R
CH1
CH2
GND
Test Tape MTT-114N
Unit

Figure 5. Azimuth Adjustment Connection Diagram

2. MOTOR SPEED ADJUSTMENT

Item	Deck Mode	Test Tape	Test Point	Adjustment	Adjust for	Remark
Normal Speed	Playback	MTT-111	TP45	VR410	3kHz±30Hz	
High Speed	Playback	MTT-111	TP45	No Adjustment (Confirmation)	6kHz±60Hz	TP40 Short 5.4kHz~6.6kHz

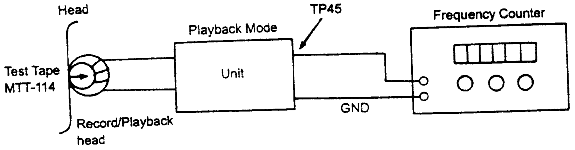

Head
TP45
Playback Mode
Frequency Counter
Test Tape MTT-114
Unit
GND
Record/Playback head

Figure 6. Motor Speed Adjustment Connection Diagram

3. PLAYBACK LEVEL ADJUSTMENT

Deck	Deck Mode	Test Tape	Test Point	Adjustment	Adjust for
Deck I	Playback	MTT-150	TP45	VR201, VR251	545mV ±1dB
Deck II	Playback	MTT-150	TP45	VR202, VR252	

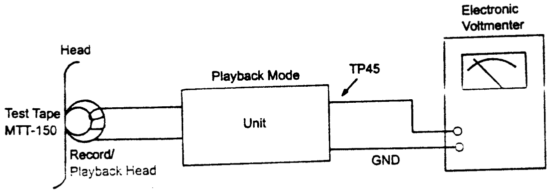

Electronic Voltmenter
Head
Playback Mode
TP45
Test Tape MTT-150
Unit
Record/ Playback Head
GND

Figure 7. Playback Level Adjustment Connection Diagram

4. BIAS FREQUENCY ADJUSTMENT

Deck	Deck Mode	Test Tape	Test Point	Adjustment	Adjust for	Remark
Deck I	Rec/Pause	Blank Tape	PN403	No adjustment (L401)	105kHz±5kHz	Deck II: Stop

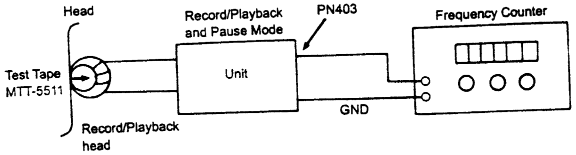

Head
Record/Playback and Pause Mode
PN403
Frequency Counter
Test Tape MTT-5511
Unit
GND
Record/Playback head

Figure 8. Bias Frequency Adjustment Connection Diagram

5. RECORD/PLAYBACK CALIBRATION ADJUSTMENT

Deck	Deck Mode	Test Tape	Test Point	Adjustment	Input	Output	Adjust for	Remark
Deck I	R/P→PB	MTT-5511 MTT-5561	TP45	VR301 VR351	400Hz 400mV (at R/P)	545mV (at PB)	545mV±1dB	Normal Speed
Deck II	Stop	—						

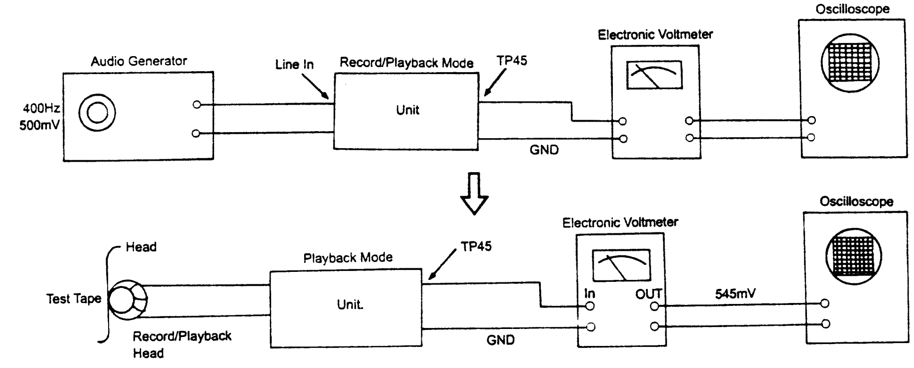

Oscilloscope
Electronic Voltmeter
Audio Generator
Line In
Record/Playback Mode
TP45
400Hz
500mV
Unit
GND
Oscilloscope
Electronic Voltmeter
Head
Playback Mode
TP45
Test Tape
Unit.
In
OUT
545mV
Record/Playback Head
GND

Figure 9. Record/Playback Calibration Adjustment Connection Diagram

6. RECORD/PLAYBACK FREQUENCY RESPONSE ADJUSTMENT

Deck	Deck Mode	Test Tape	Test Point	Adjustment	Adjust for	Remark
Deck I	R/P→PB	MTT-5511 MTT-5561	TP45	VR401 VR451	3dB range: 250Hz~10kHz 3dB~4dB range: 10kHz~12.5kHz	Normal Speed
Deck II	Stop	—				

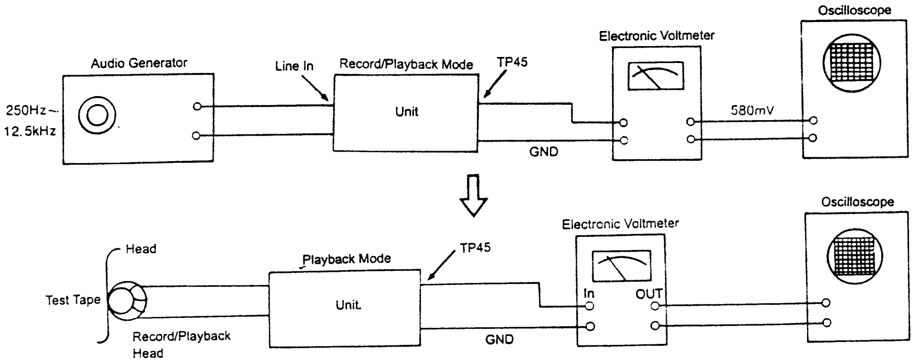
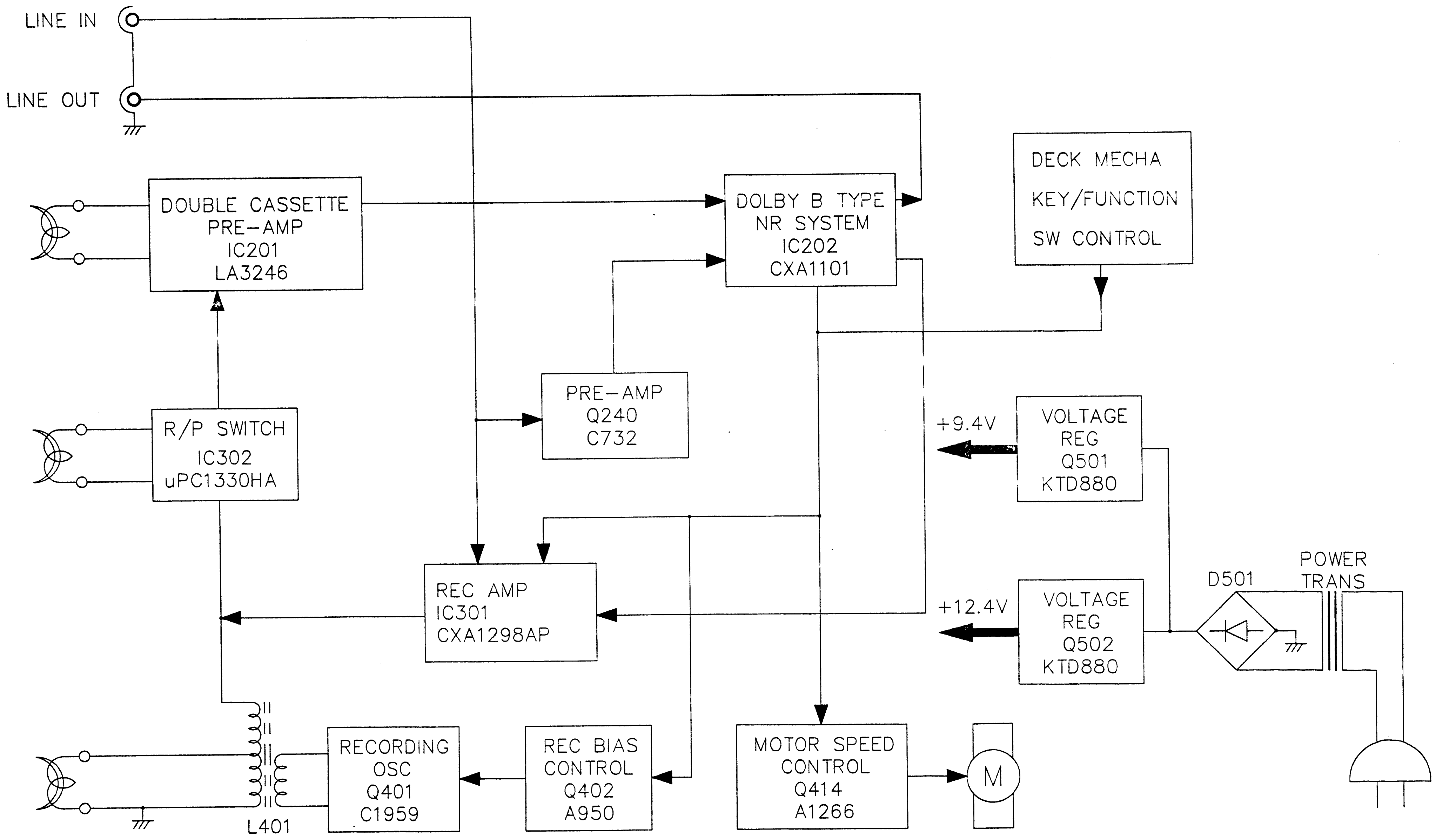
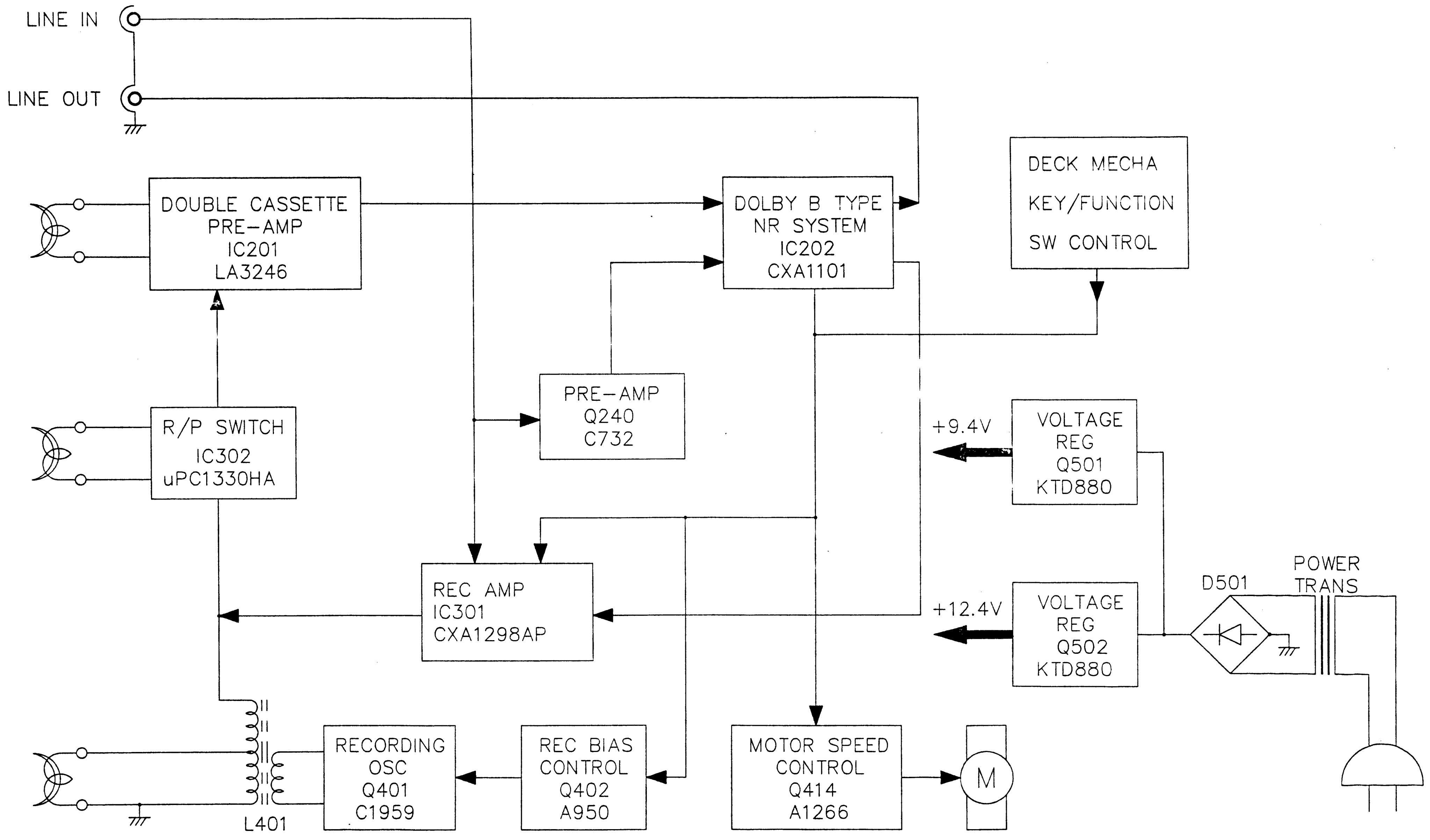

Oscilloscope
Electronic Voltmeter
Audio Generator
Line In
Record/Playback Mode
TP45
250Hz~
12.5kHz
Unit
580mV
GND
Oscilloscope
Electronic Voltmeter
Head
Playback Mode
TP45
Test Tape
Unit.
In
OUT
Record/Playback Head
GND

Figure 10. Record Level Adjustment Connection Diagram

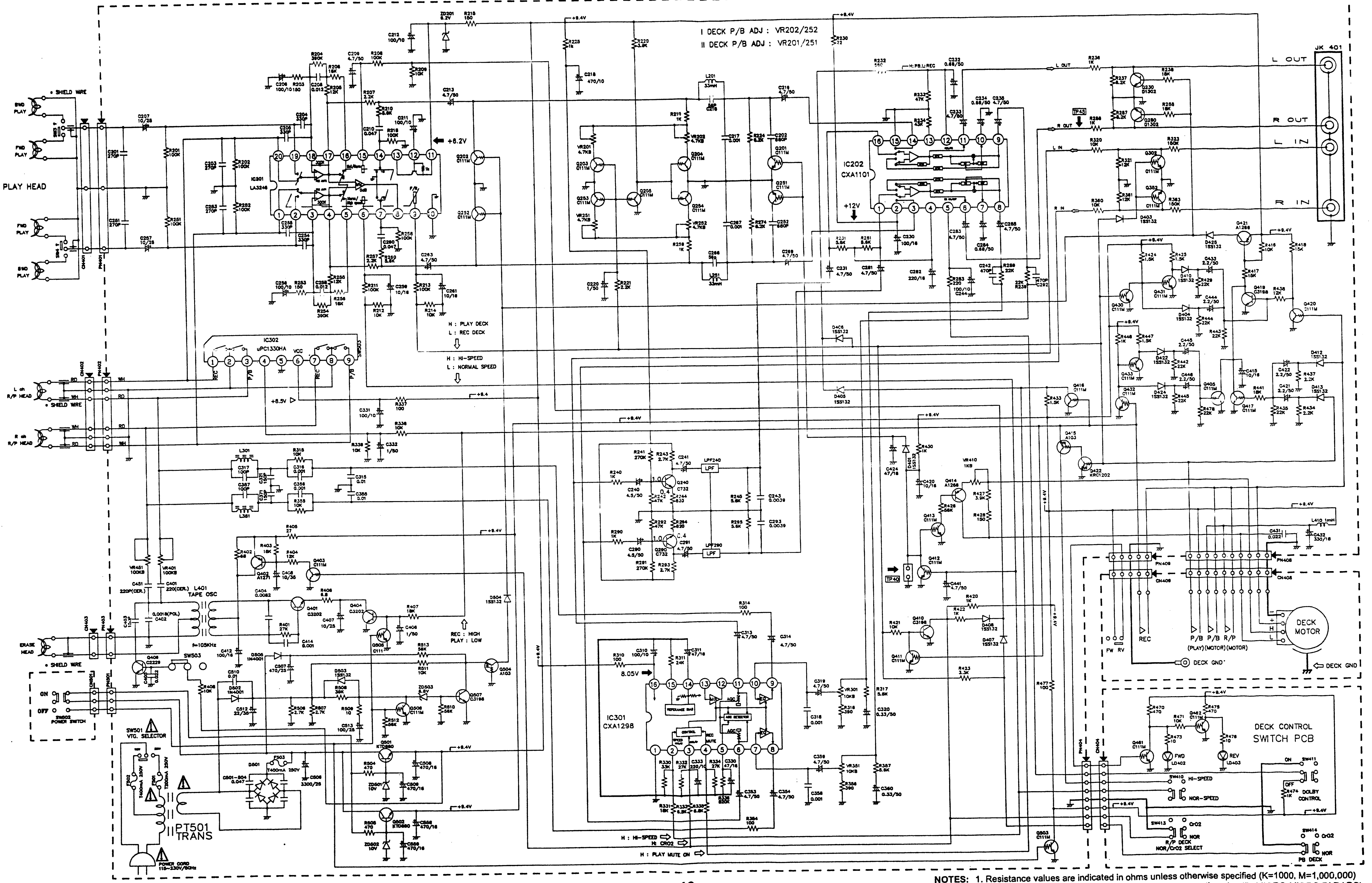
BLOCK DIAGRAM


LINE IN
LINE OUT
DOUBLE CASSETTE PRE-AMP IC201 LA3246
R/P SWITCH IC302 uPC1330HA
PRE-AMP Q240 C732
DOLBY B TYPE NR SYSTEM IC202 CXA1101
DECK MECHA KEY/FUNCTION SW CONTROL
REC AMP IC301 CXA1298AP
+9.4V
VOLTAGE REG Q501 KTD880
+12.4V
VOLTAGE REG Q502 KTD880
D501
POWER TRANS
L401
RECORDING OSC Q401 C1959
REC BIAS CONTROL Q402 A950
MOTOR SPEED CONTROL Q414 A1266
M

BLOCK DIAGRAM


LINE IN
LINE OUT
DOUBLE CASSETTE PRE-AMP IC201 LA3246
DOLBY B TYPE NR SYSTEM IC202 CXA1101
DECK MECHA KEY/FUNCTION SW CONTROL
PRE-AMP Q240 C732
R/P SWITCH IC302 uPC1330HA
+9.4V
VOLTAGE REG Q501 KTD880
REC AMP IC301 CXA1298AP
+12.4V
VOLTAGE REG Q502 KTD880
D501
POWER TRANS
RECORDING OSC Q401 C1959
REC BIAS CONTROL Q402 A950
MOTOR SPEED CONTROL Q414 A1266
M
L401

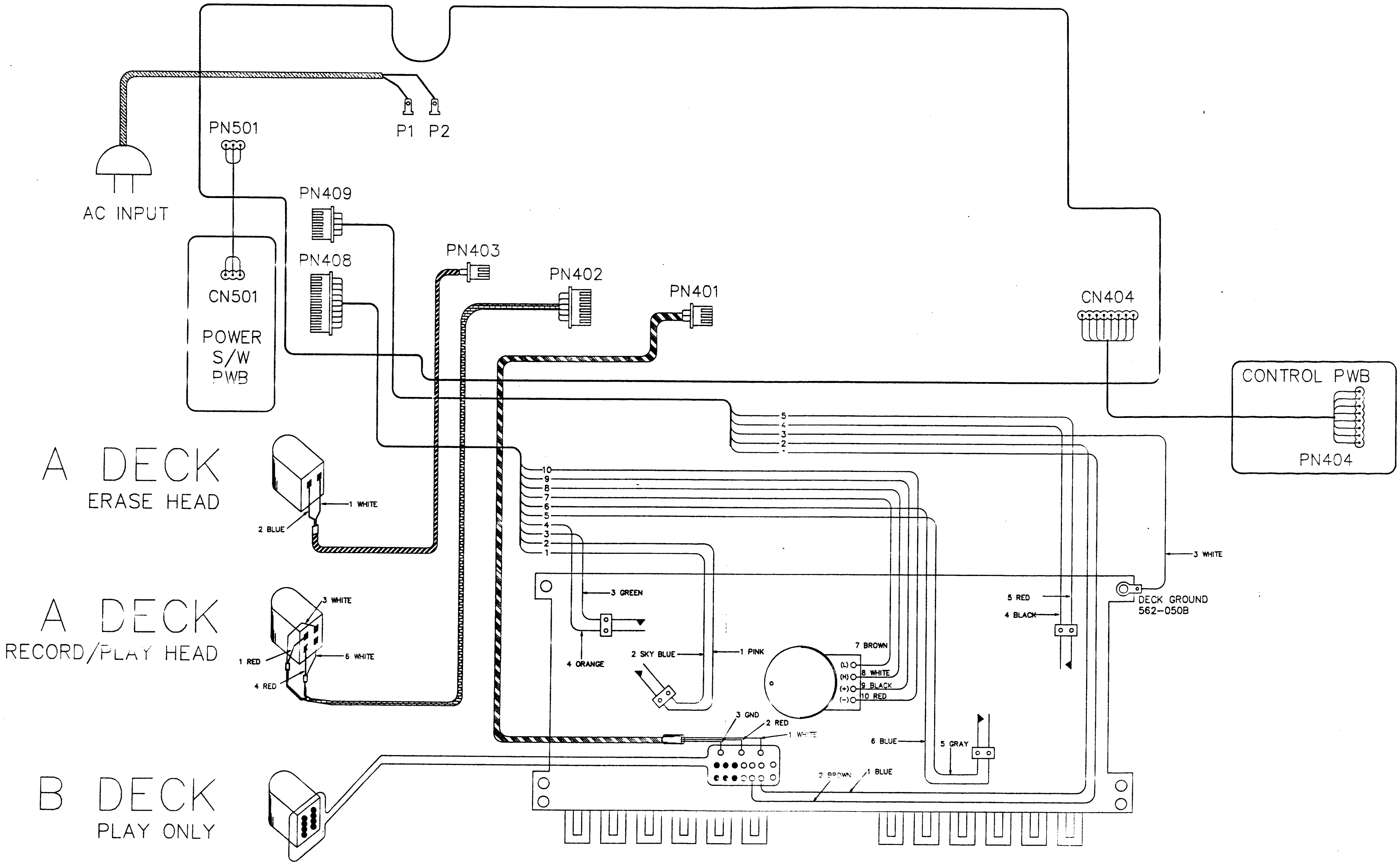
SCHEMATIC DIAGRAM



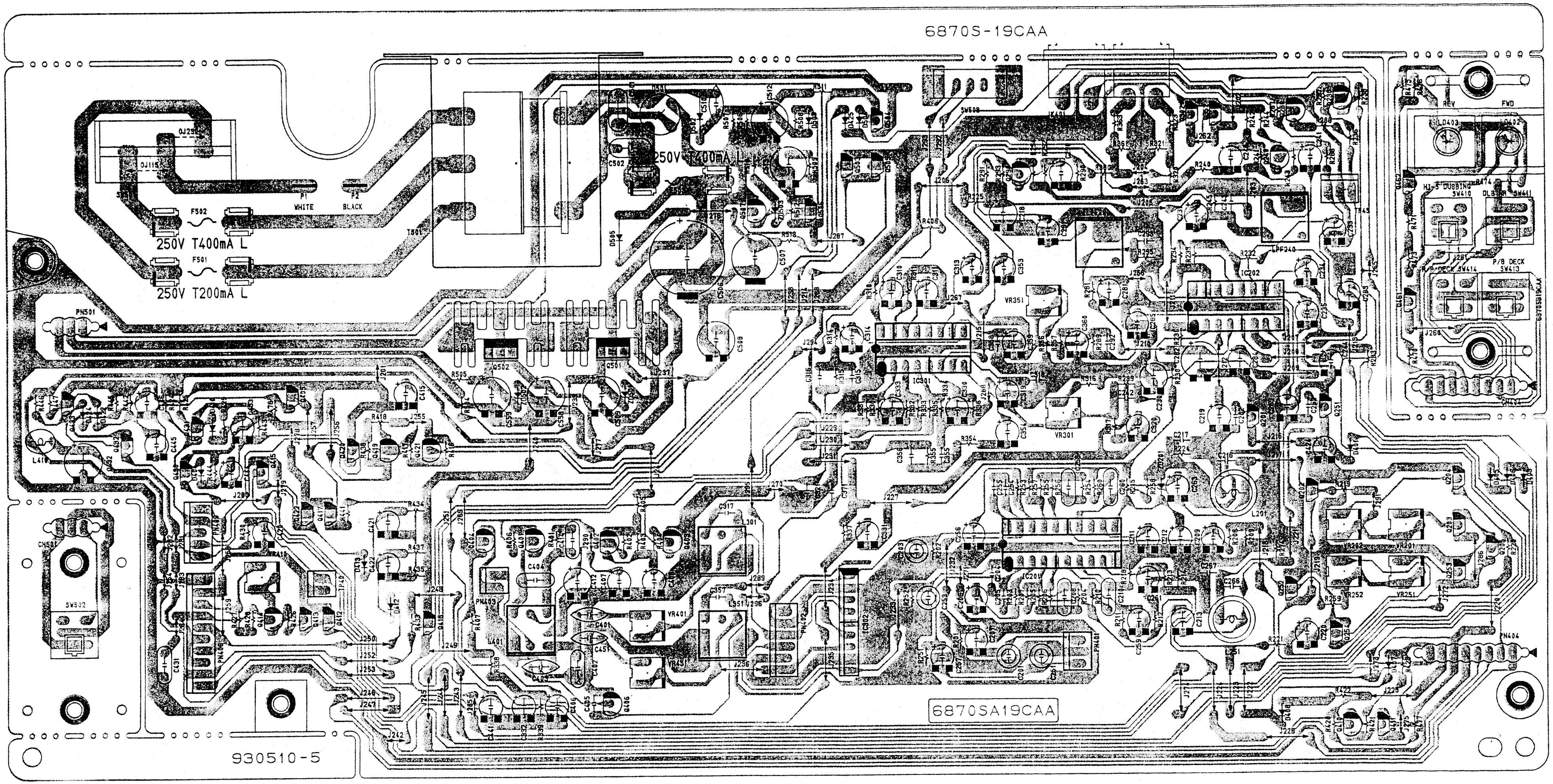
I DECK P/B ADJ : VR202/252
II DECK P/B ADJ : VR201/251
PLAY HEAD
FWD PLAY
SND PLAY
L ch R/P HEAD
R ch R/P HEAD
ERASE HEAD
SHIELD WIRE
IC301 LA3246
IC302 uPC1330HA
IC202 CXA1101
IC301 CXA1298
+8.2V
+12V
8.05V
+8.5V
+9.4V
H : PLAY DECK
L : REC DECK
H : HI-SPEED
L : NORMAL SPEED
REC : HIGH
PLAY : LOW
L401 TAPE OSC
f=105KHz
SW503
SW501 VTG. SELECTOR
SW502 POWER SWITCH
ON
OFF
PT501 TRANS
POWER CORD
TP40
TP45
LPF240
LPF290
L OUT
R OUT
L IN
R IN
JK 401
DECK MOTOR
DECK GND
FW RV
REC
P/B P/B R/P
(PLAY)(MOTOR)(MOTOR)
DECK CONTROL SWITCH PCB
FWD LD402
REV LD403
HI-SPEED
NOR-SPEED
DOLBY CONTROL
R/P DECK NOR/CrO2 SELECT
PB DECK
H : HI-SPEED
H: CRO2
H : PLAY MUTE ON
PH401
CN401
PH402
CN402
PH403
CN403
PH404
CN404
PH408
CN408
PH409
CN409

NOTES: 1. Resistance values are indicated in ohms unless otherwise specified (K=1000, M=1,000,000)
2. Capacitance values are shown in microfarads unless otherwise (P=MICRO-MICRO FARADS)

WIRING DIAGRAM

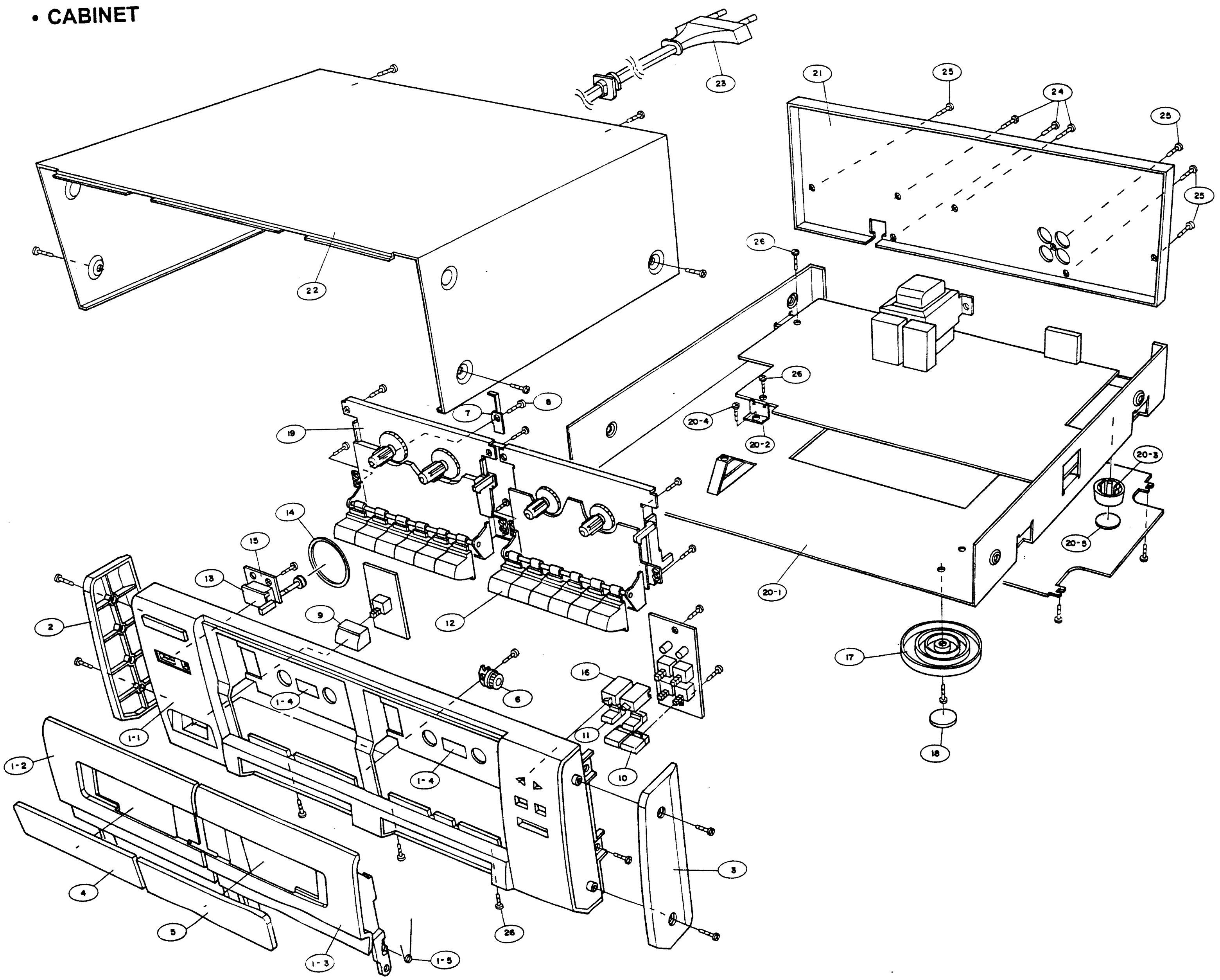

PN501
P1
P2
AC INPUT
PN409
PN408
PN403
PN402
PN401
CN501
POWER S/W PWB
CN404
CONTROL PWB
PN404
A DECK
ERASE HEAD
1 WHITE
2 BLUE
A DECK
RECORD/PLAY HEAD
3 WHITE
1 RED
6 WHITE
4 RED
B DECK
PLAY ONLY
5
4
3
2
1
10
9
8
7
6
5
4
3
2
1
3 WHITE
3 GREEN
4 ORANGE
2 SKY BLUE
1 PINK
5 RED
4 BLACK
DECK GROUND
562-050B
7 BROWN
(L)
(H)
8 WHITE
(+)
9 BLACK
(-)
10 RED
3 GND
2 RED
1 WHITE
6 BLUE
5 GRAY
2 BROWN
1 BLUE

PCB LAYOUT


6870S-19CAA
250V T400mA L
250V T200mA L
F502
F501
WHITE
BLACK
T501
PN501
Q502
Q501
C502
250V T400mA L
SW508
IC301
IC202
VR351
VR301
LPF240
REV
FWD
HI-S DUBBING
SW410
SW411
P/B DECK
SW414
SW413
CN404
CN501
SW502
PN405
VR401
L401
L301
C317
L351
PN403
PN402
C302
PN401
VR252
VR251
VR201
L291
PN404
6870SA19CAA
930510-5

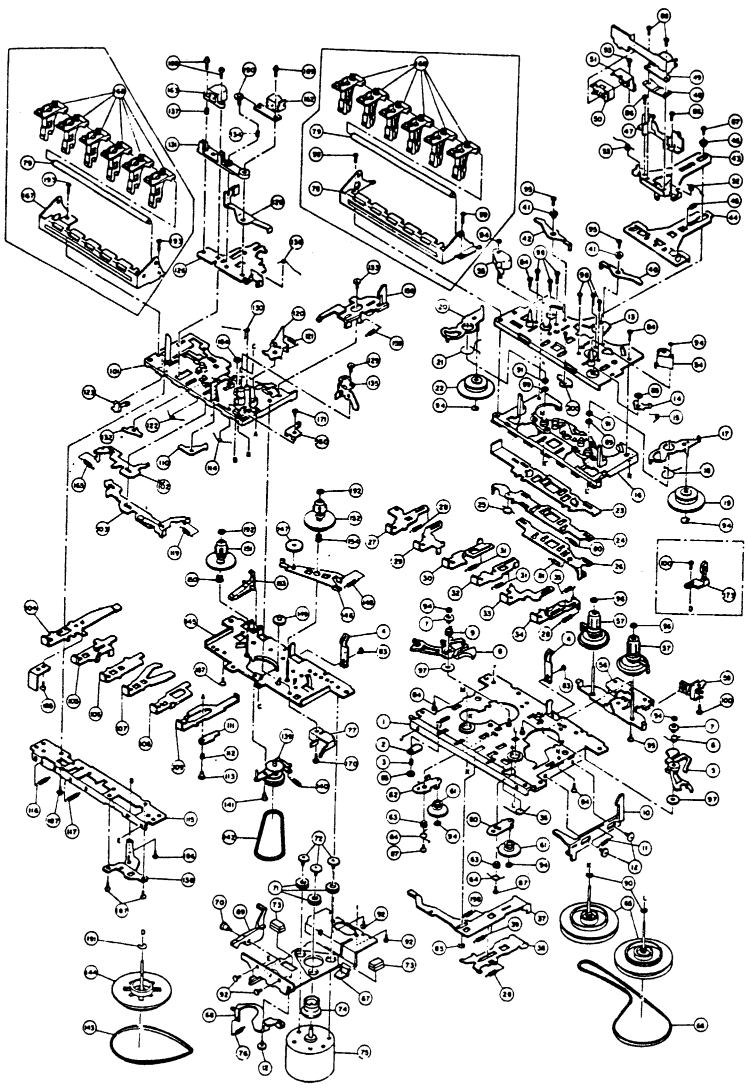
EXPLODED VIEW/PARTS LIST

• CABINET



REF. NO.	PART NO.	DESCRIPTION	Q'TY
1	3721SU0044B	Panel Assembly, Front	1
1-1	3720S-0044B	Panel, Front	1
1-2	226-530B	Door, Cassette –L	1
1-3	226-531B	Door, Cassette –R	1
1-4	256-188A	Plate, Reflection	2
1-5	442-085D	Spring	2
2	246-516B	Decoration, Side (A) –L	1
3	246-517B	Decoration, Side (A) –R	1
4	236-945A	Window, Door –A	1
5	236-946A	Window, Door –B	1
6	444-115A	Damper Assembly	2
7	321-221A	Bracket, Record	1
8	353-022K	Screw, 2x3	1
9	4940S-0216A	Knob, Push	1
10	4940S-0226A	Knob, Tape	2
11	4940S-0227A	Knob, Hi-speed	2
12	4940S-0228A	Knob, Deck	12
13	517-117A	Counter, Tape	1
14	451-146D	Belt, Counter	1
15	4810S-0512A	Bracket, Counter	1
16	463-058A	Lens, Direction	2
17	265-021A	Foot, Front	2
18	472-190C	Felt	2
19	410-280D	Deck Sub Assembly	1
20	3141SU0018B	Chassis Assembly, Main	1
20-1	3140S-0018B	Chassis, Main	1
20-2	4810S-0505A	Bracket, PCB	1
20-3	265-004A	Foot, Rubber	2
20-4	1TRL0302016	Screw, 3x6	2
20-5	472-610F	Felt	2
21	3720S-0059B	Panel, Back	1
22	213-532B	Cabinet, Top	1
23	681-005A	Cord, Power	1
24	353-070C	Screw, 4x12	2
25	353-025C	Screw, Special 3x10	30
26	1TRL0302018	Screw, 3x6	10

• DECK MECHANISM



SP Serviceable Parts
NSP Not Serviceable Parts

REF NO	PART NO	DESCRIPTION	REMARK
	419-060B	Deck Mechanism, TN521ZSW-398	SP
1	99T-2092	Chassis Assembly	NSP
2	99T-2093	Pause Lever	NSP
3	99T-2094	Pause Lever Spring	NSP
4	99T-2095	Pack Screw Plate	NSP
5	99T-2096	Auto Lever (F)	NSP
6	99T-2097	Auto Lever (F) Spring	NSP
7	99T-2098	Spring Stopper	NSP
10	99T-2101	Eject Slide Lever	NSP
11	99T-2102	Eject Slide Lever	NSP
12	99T-2103	PK Coller Screw (A)	NSP
13	99T-2104	Sub Chassis Assembly	NSP
14	99T-2105	Turn Over Arm	NSP
15	99T-2106	Turn Over Spring	NSP
16	99T-2107	Button Base Assembly	NSP
17	99T-2108	T-Gear Arm (F) Assembly	NSP
18	99T-2109	T-Gear Arm (F) Spring	NSP
19	99T-2110	Azimuth Screw M2x7	NSP
20	99T-2111	T-Gear Arm (R) Assembly	NSP
21	99T-2112	T-Gear Arm (R) Spring	NSP
22	99T-2113	T-Cam Gear (R)	NSP
23	99T-2114	Slide Plate Assembly	NSP
24	99T-2115	Lock Actuator Assembly	NSP
25	99T-2116	Lock Release Spring	NSP
26	99T-2117	Switch Actuator Assembly	NSP
27	99T-2118	Mode Button Assembly (S)	NSP
28	99T-2119	Button Lever Spring	NSP
29	99T-2120	Play Button Lever (S)	NSP
30	99T-2121	FF Button Lever R (S)	NSP
31	99T-2122	FF Button Lever Spring	NSP
32	99T-2123	FF Button Lever F (S)	NSP
33	99T-2124	Stop Button Lever (S)	NSP
34	99T-2125	PGM Button Lever (S)	NSP
35	99T-2126	H Pull Arm Spring	NSP
36	99T-2127	Stop Button Lever Spring	NSP
37	99T-2128	Relay Plate	NSP
38	99T-2129	FF Switch Plate	NSP
39	99T-2130	R.C Spring	NSP
40	99T-2131	Auto Control Arm (F)	NSP
41	99T-2132	Control Coller	NSP
42	99T-2133	Auto Control Arm (R)	NSP
43	99T-2134	Head Panel	NSP
44	99T-2135	R.C Plate	NSP
45	99T-2136	R.C Plate Spring	NSP
46	99T-2137	H.P Coller	NSP
47	99T-2138	Tape Guide	NSP
48	99T-2139	Head Spring Plate	NSP
49	99T-9974	P.Head MR35P-KF243	SP
50	99T-2141	Slide Switch	NSP
51	99T-2142	Switch Bracket	NSP
52	99T-2143	Pinch Roller Spring (F)	NSP
53	99T-2144	Pinch Roller Spring (R)	NSP
54	99T-2145	Pinch Roller (F) Assembly	SP
55	99T-2146	Pinch Roller (R) Assembly	SP
56	99T-2147	Reel Plate Assembly	NSP
57	99T-2148	Reel Assembly	NSP
58	99T-2149	Leaf Switch	NSP
60	99T-2150	FF Gear Arm (F) Assembly	SP
61	99T-2151	FF Gear	SP
62	99T-2152	FF Gear Arm (R) Assembly	SP
63	99T-2153	FF Gear Arm Coller	NSP
64	99T-2154	FF Gear Arm Spring (F)	NSP
65	99T-2155	Flywheel Assembly	SP
66	99T-2156	Main Belt	SP
67	99T-2157	Motor Bracket	NSP
68	99T-2158	P. Kick Lever	NSP
69	99T-2159	P. Kick Lever B	NSP
70	99T-2160	PK Coller Screw B	NSP
71	99T-2161	Motor Rubber	NSP
72	99T-2162	M. Coller Screw	NSP
73	99T-2163	Anti-Vibration Felt	NSP
74	99T-2164	Motor Pulley	SP
75	99T-0504	Motor EG530YD9B	SP
76	99T-2166	P. Kick Lever Spring	NSP
77	99T-2167	Pause Prtet BKT	NSP
78	99T-2168	Button Frame (S)	NSP
79	99T-2169	TN Lever Shaft	NSP
80	99T-2170	Lock Actuator Spring	NSP
81	99T-2171	Switch Actuator Spring	NSP
83	99T-2172	C. Taping Screw M2×3	NSP
84	99T-2173	P. Taping Screw M2×3	NSP
85	99T-2174	P. Washer Cut 2.1×5×0.5	NSP
86	99T-2175	+ Tams Screw M21×6	NSP
87	99T-2176	Camera S Taping Screw	NSP
88	99T-2177	Screw M2×4.5	NSP
89	99T-2178	P. Washer Screw	NSP
90	99T-2179	P. Washer	NSP
91	99T-2180	P. Washer	NSP
92	99T-2181	+ C Tap Screw	NSP
93	99T-2182	Camera S Tap Screw	NSP
94	99T-2183	P. Washer Cut	NSP
95	99T-2184	Camera S Tap Screw	NSP
96	99T-2185	P. Washer Cut	NSP
97	99T-2186	P. Washer Cut	NSP
98	99T-2187	Camera S Tap Screw	NSP
99	99T-2188	Camera S Tap Screw	NSP
100	99T-2189	+C Tap Screw	NSP
101	99T-2190	Base Assembly	NSP
102	99T-2191	Switch Actuator	NSP
103	99T-2191	Switch Actuator	NSP
104	99T-2193	Record Button Lever	NSP
105	99T-2194	Play Button Lever	NSP
106	99T-2195	Rew Button Lever	NSP
107	99T-2196	FF Button Lever	NSP
108	99T-2197	Stop Button Lever	NSP
109	99T-2198	Pause Button Lever Assembly	NSP
110	99T-2199	Rew Lever	NSP
111	99T-2200	Pause Lever	NSP
112	99T-2201	Pause Lever Spring	NSP
113	99T-2202	P. Stopper	NSP
114	99T-2203	Button Lever Spring (C)	NSP
115	99T-2204	Sub Chassis	NSP
116	99T-2205	Button Lever Spring (A)	NSP
117	99T-2206	Play Button Lever Spring	NSP
119	99T-2207	Actuator Spring	NSP
120	99T-2208	Auto Lever	NSP
121	99T-2209	Auto Lever Spring	NSP
122	99T-2210	Button Lever Spring (B)	NSP
123	99T-2211	Leaf Switch	NSP
126	99T-2212	Head Panel	NSP
128	99T-2213	Sensing Plate Assembly	NSP
129	99T-2214	MS Screw	NSP
130	99T-2215	Head Panel Spring	NSP
131	99T-2216	Head Base	NSP
132	99T-2217	RP Stopper	NSP
133	99T-2218	PME Screw	NSP
134	99T-2219	Azimuth Spring	NSP
135	99T-2220	Pinch Roller Arm Assembly	SP
136	99T-2221	Pinch Roller Spring	SP
137	99T-2222	E.H Spring	NSP
138	99T-2223	Metal Guide	NSP
139	99T-2224	RF Pulley Arm Assembly	SP
140	99T-2225	RF Pulley Arm Assembly	SP
141	99T-2226	RF Arm Coller Screw	NSP
142	99T-2227	RF Belt	SP
143	99T-2228	Main Belt	SP
144	99T-2229	Flywheel Assembly	SP
145	99T-2230	T. Gear Dete Assembly	NSP
146	99T-2231	T. Gear Dete Assembly	NSP
147	99T-2232	T. Roller Gear	NSP
148	99T-2233	TG Plate Spring	NSP
149	99T-2234	FF Gear	SP
150	99T-2235	Back Tension Spring	NSP
151	99T-2236	P. Gear	NSP
152	99T-2237	Take Up Reel Assembly	SP
153	99T-2238	Record Safety Lever	NSP
154	99T-2239	Back Tension Spring	NSP
158	99T-2240	Eject Slide Lever	SP
159	99T-2241	Eject Slide Lever Spring	NSP
160	99T-2242	Sensing Bracket	NSP
162	99T-9986	Head RP SS15R-AA4N1	SP
163	99T-9985	E. Head LE15A-C1	SP
165	99T-2245	SW Actuator Spring	NSP
167	99T-2246	Button Frame (S)	NSP
168	99T-2247	Operation Lever	NSP
170	99T-2248	P. Taping Screw M2×6	NSP
171	99T-2249	Camera Tap Screw	NSP
173	99T-2250	Leaf SW MSW-1664	SP
184	99T-2251	P. Washer Cut	NSP
185	99T-2252	Tams Screw M2×3	NSP
186	99T-2253	+C Tap Screw M2×4	NSP
187	99T-2254	P Tap Bind Screw	NSP
188	99T-2255	+ − Cap Screw M2×8	NSP
189	99T-2256	+ − Cap Screw M2×7	NSP
190	99T-2257	Azimuth Screw M2×7	NSP
191	99T-2258	P. Washer	NSP
192	99T-2259	P. Washer Cut	NSP
193	99T-2260	Camera Screw M2×7	NSP
198	99T-2261	Button Lever Spring (P)	NSP
200	99T-2262	RC Arm	NSP

[REPLACEMENT PARTS LIST]

PAGE : 1

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S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
			1TRL0302016	BRAIZER HEAD TA SCREW + 2 CUT	D 3.0 L 6.0 MSWR3/(BK)	
			213-532B	CABINET	TOP (FK-532)	
			226-530B	DOOR	CST-L (FK-532 BU2)	
			226-531B	DOOR	CST-R (FK-532 BU2)	
			236-945A	WINDOW	DOOR-A (FK-532 BG1)	
			236-946A	WINDOW	DOOR-B (FK-532 BG1)	
			246-516B	DECORATION	SIDE(A)-L (FA-532 BU2)	
			246-517B	DECORATION	SIDE(A)-R (FA-532 BU2)	
			256-188A	PLATE	REFLECTION	
			265-021A	FOOT	FRONT (FA-532 BG1)	
			265-022A	FOOT	RUBBER (FA-532 BG1)	
			3140S-0018B	CHASSIS	MAIN (FT-532)	
			3141SU0018B	CHASSIS ASSY	MAIN (FT-532)	
			321-221A	BRACKET	REC(FJ-250KW1)	
			353-022K	SCREW	* TAPTITE 2X3 FZMY BINDING	
			353-028A	SCREW	TAP TITE 2X6 FZMY	
			353-070C	SCREW	* TAPPING,WASHER 4X12 FBK	
			3720S-0044B	PANEL	FRONT (FK-532 BU2)	
			3720S-0059B	PANEL	BACK (FK-532 BU2)	
			3721SU0044B	PANEL ASSY	FRONT (FK-532 BU2)	
			3875S-5033A	MANUAL, OPERATION ASSY	FK-532 BU2	
			3890S-C013C	BOX	(FK-532 BU2)	
			410-280D	DECK SUB ASSY	FK-532 DECK SUB ASSY	
			419-060B	DECK MECHANISM	TN521ZSW-349 FM-91/92	
			442-085D	SPRING	SPRING (MINI10 BG1)	
			444-115A	DAMPER	DAMPER AY (G332, BK)	
			451-146D	BELT	BELT COUNTER D=48,0.8X0.8 #320	
			463-058A	LENS	DIRECTION(FK-532)	
			472-190C	FELT		
			4810S-0505A	BRACKET	PCB (FT-532 BG1)	
			4810S-0512A	BRACKET	COUNTER (FK-530/532)	
			4940S-0216A	KNOB	PUSH(FA-532 BG1)	
			4940S-0226A	KNOB	TAPE (FK-532L BG1)	
			4940S-0227A	KNOB	HI-SPEED (FK-532)	
			4940S-0228A	KNOB	DECK (FK-532 BG1)	
			517-117A	COUNTER TAPE	M3BC080-200-661 (S)	
			558-006A	SWITCH SPECIAL	LEAF SWITCH MIC MSW0026NBKCV	
			564-017E	PLUG CONTACT CORD,PHONE	700M/M NON UL	
			586-001C	FUSE HOLDER	PIN-T 5X20 KS (S)	
			681-005A	CORD POWER	681-004F+B172 KDK	
			6871S-19CAA	PWB ASSY	FK-532 PWB ASSY(MAIN)	
			6871SA19CAA	PWB ASSY	FK-532 PWB ASSY(MAIN)	
			6871SB19CAA	PWB ASSY	FK-532 PWB ASSY(MAIN)(CONTROL)	
			99T-0504	DECK PARTS	MOTOR EG530YD9B 3107 #42	
			99T-2145	DECK AND OTHER PARTS	PINCH ROLR(F) AY 1851 09 501	
			99T-2146	DECK AND OTHER PARTS	PINCH ROLR(R) AY 1851 10 501	
			99T-2151	DECK AND OTHER PARTS	FF GEAR 1851 07 03	
			99T-2155	DECK AND OTHER PARTS	FLYWHEEL AY 1851 12 501	
			99T-2156	DECK PARTS	1821 12 142 MAIN BELT	
			99T-2211	DECK AND OTHER PARTS	LEAF SW MSW-1541T 6401 01 149	

『REPLACEMENT PARTS LIST』 P A G E : 2

RUN-DATE : 93.05.26

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
			99T-2220	DECK AND OTHER PARTS	PINCH ROLLER ARMAY 1821 04 302	
			99T-2221	DECK AND OTHER PARTS	PINCH ROLLER SP 1821 04 14	
			99T-2224	DECK AND OTHER PARTS	RF PULLEY ARM AY 1821 07 328	
			99T-2227	DECK AND OTHER PARTS	RF BELT 1821 07 03	
			99T-2228	DECK AND OTHER PARTS	MAIN BELT 1668 08 01C	
			99T-2229	DECK AND OTHER PARTS	FLYWHEEL AY 1821 09 304	
			99T-2234	DECK AND OTHER PARTS	FF GEAR 1821 10 70	
			99T-2237	DECK AND OTHER PARTS	TAKE UP REEL AY 1821 10 338	
			99T-2240	DECK AND OTHER PARTS	EJECT SLIDE LEVER 1821 13 04	
			99T-2250	DECK AND OTHER PARTS	LEAF SW MSW-1664 6401 01 125	
			99T-9974	DECK PARTS	MR35P-KF243 P/B 12.5 SY	
			99T-9985	DECK PARTS	E.HEAD LE15A-C1	
			99T-9986	DECK PARTS	R.PHEAD SS15R-AA4N1	
		CN401	IAC%0020	CONNECTOR ASSY	GS IL-G03 259#28 280 (S)	
		CN402	IHF*003F	CONNECTOR ASSY	C.AY IL-G06 (I) 300	
		CN403	IBB*030H	CONNECTOR ASSY	GS IL-G02 (G) 340 (S)	
		CN404	561-647H	CONNECTOR	F-WIRE HOLDER MX51052-0800 (S)	
		CN408	IJJ+300H	CONNECTOR ASSY	C.AY GS IL-G10 (21) 340	
		CN409	IEE-300J	CONNECTOR ASSY	GS IL-G05 (21) 380	
		C201	0CY2710K499	CAPACITOR.POLYESTYROL	270PF 50V J PSR-HT TP	
		C202	0CN6810K518	CAPACITOR TUBULA(HIGH DIELE)	680P 50V K B TA26	
		C203	0CY2710K499	CAPACITOR.POLYESTYROL	270PF 50V J PSR-HT TP	
		C206	0CE1076D618	CAPACITOR.ELECTROLYTIC	100M SMS 10V M FM5 TP(5)	
		C207	0CE1066F618	CAPACITOR.ELECTROLYTIC	10M SMS 16V M FM5 TP(5)	
		C208	0CQ1231N409	CAPACITOR POLYESTER(MYLAR)	0.012U 100V J POLY TP	
		C209	0CE4756K618	CAPACITOR.ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C210	0CQ4731N409	CAPACITOR POLYESTER(MYLAR)	0.047U 100V J POLY TP	
		C211	0CE1076D618	CAPACITOR.ELECTROLYTIC	100M SMS 10V M FM5 TP(5)	
		C212	0CE1076D618	CAPACITOR.ELECTROLYTIC	100M SMS 10V M FM5 TP(5)	
		C213	0CE4756K618	CAPACITOR.ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C216	0CX5600K408	CAPACITOR TUBULA(T.C)	56P 50V J SL TA26	
		C217	0CN1020K518	CAPACITOR TUBULA(HIGH DIELE)	1000P 50V K B TA26	
		C218	0CE477CF618	CAPACITOR.ELECTROLYTIC	470UF SHL 16V M FL TP5	
		C219	0CE4756K618	CAPACITOR.ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C220	0CE1056K618	CAPACITOR.ELECTROLYTIC	1.0M SMS 50V M FL TP(5)	
		C230	0CE3376F618	CAPACITOR.ELECTROLYTIC	330M SMS 16V M FM5 TP5	
		C231	0CE4756K618	CAPACITOR.ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C233	0CE4756K618	CAPACITOR.ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C234	0CE6846K618	CAPACITOR.ELECTROLYTIC	0.68M SMS 50V M FL TP(5)	
		C235	0CE4756K618	CAPACITOR.ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C240	0CE4756K618	CAPACITOR.ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C241	0CE4756K618	CAPACITOR.ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C242	0CN4710K518	CAPACITOR TUBULA(HIGH DIELE)	470P 50V K B TA26	
		C243	0CN3920F668	CAPACITOR TUBULA(HIGH DIELE)	3900P 16V M X TA26	
		C244	0CE1076D618	CAPACITOR.ELECTROLYTIC	100M SMS 10V M FM5 TP(5)	
		C251	0CY2710K499	CAPACITOR.POLYESTYROL	270PF 50V J PSR-HT TP	
		C252	0CN6810K518	CAPACITOR TUBULA(HIGH DIELE)	680P 50V K B TA26	
		C253	0CY2710K499	CAPACITOR.POLYESTYROL	270PF 50V J PSR-HT TP	
		C256	0CE1076D618	CAPACITOR.ELECTROLYTIC	100M SMS 10V M FM5 TP(5)	
		C257	0CE1066F618	CAPACITOR.ELECTROLYTIC	10M SMS 16V M FM5 TP(5)	

『REPLACEMENT PARTS LIST』 P A G E : 3

RUN-DATE : 93.05.26

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		C258	0CQ1231N409	CAPACITOR POLYESTER(MYLAR)	0.012U 100V J POLY TP	
		C259	0CE1066F618	CAPACITOR.ELECTROLYTIC	10M SMS 16V M FM5 TP(5)	
		C260	0CQ4731N409	CAPACITOR POLYESTER(MYLAR)	0.047U 100V J POLY TP	
		C261	0CE1066F618	CAPACITOR.ELECTROLYTIC	10M SMS 16V M FM5 TP(5)	
		C263	0CE4756K618	CAPACITOR.ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C266	0CX5600K408	CAPACITOR TUBULA(T.C)	56P 50V J SL TA26	
		C267	0CN1020K518	CAPACITOR TUBULA(HIGH DIELE)	1000P 50V K B TA26	
		C269	0CE4756K618	CAPACITOR.ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C281	0CE4756K618	CAPACITOR.ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C282	0CE2276F618	CAPACITOR.ELECTROLYTIC	220M SMS 16V M FM5 TP(5)	
		C283	0CE4756K618	CAPACITOR.ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C284	0CE6846K618	CAPACITOR.ELECTROLYTIC	0.68M SMS 50V M FL TP(5)	
		C285	0CE4756K618	CAPACITOR.ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C290	0CE4756K618	CAPACITOR.ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C291	0CE4756K618	CAPACITOR.ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C292	0CN4710K518	CAPACITOR TUBULA(HIGH DIELE)	470P 50V K B TA26	
		C293	0CN3920F668	CAPACITOR TUBULA(HIGH DIELE)	3900P 16V M X TA26	
		C310	0CE1076D618	CAPACITOR.ELECTROLYTIC	100M SMS 10V M FM5 TP(5)	
		C311	0CE4766F618	CAPACITOR.ELECTROLYTIC	47M SMS 16V M FL TP(5)	
		C313	0CE4756K618	CAPACITOR.ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C314	0CE4756K618	CAPACITOR.ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C315	0CN1030F678	CAPACITOR TUBULA(HIGH DIELE)	0.01M 16V M Y TA26	
		C316	0CN1020K518	CAPACITOR TUBULA(HIGH DIELE)	1000P 50V K B TA26	
		C317	0CN1010K518	CAPACITOR TUBULA(HIGH DIELE)	100P 50V K B TA26	
		C318	0CN1020K518	CAPACITOR TUBULA(HIGH DIELE)	1000P 50V K B TA26	
		C319	0CE4756K618	CAPACITOR.ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C320	0CE3346K618	CAPACITOR.ELECTROLYTIC	0.33M SMS 50V M FL TP(5)	
		C321	0CN1510K518	CAPACITOR TUBULA(HIGH DIELE)	150P 50V K B TA26	
		C330	0CE4766F618	CAPACITOR.ELECTROLYTIC	47M SMS 16V M FL TP(5)	
		C331	0CE1076D618	CAPACITOR.ELECTROLYTIC	100M SMS 10V M FM5 TP(5)	
		C332	0CE1056K618	CAPACITOR.ELECTROLYTIC	1.0M SMS 50V M FL TP(5)	
		C333	0CE2276D618	CAPACITOR.ELECTROLYTIC	220M SMS 10V M FM5 TP(5)	
		C353	0CE4756K618	CAPACITOR.ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C354	0CE4756K618	CAPACITOR.ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C355	0CN1030F678	CAPACITOR TUBULA(HIGH DIELE)	0.01M 16V M Y TA26	
		C356	0CN1020K518	CAPACITOR TUBULA(HIGH DIELE)	1000P 50V K B TA26	
		C357	0CN1010K518	CAPACITOR TUBULA(HIGH DIELE)	100P 50V K B TA26	
		C358	0CN1020K518	CAPACITOR TUBULA(HIGH DIELE)	1000P 50V K B TA26	
		C359	0CE4756K618	CAPACITOR.ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C360	0CE3346K618	CAPACITOR.ELECTROLYTIC	0.33M SMS 50V M FL TP(5)	
		C371	0CN1510K518	CAPACITOR TUBULA(HIGH DIELE)	150P 50V K B TA26	
		C401	0CC2210K415	CAPACITOR CERAMIC(TEMP COMP)	220P 50V J NPO TS	
		C402	0CQ1821R449	CAPACITOR POLYESTER(MYLAR)	1800PF-J 250V TP	
		C404	0CQ8221N409	CAPACITOR POLYESTER(MYLAR)	0.0082U 100V J POLY TP	
		C405	0CN2230H948	CAPACITOR.TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C407	0CE1066J618	CAPACITOR.ELECTROLYTIC	10M SMS 35V M FL TP(5)	
		C408	0CE1066J618	CAPACITOR.ELECTROLYTIC	10M SMS 35V M FL TP(5)	
		C412	0CE1076F618	CAPACITOR.ELECTROLYTIC	100M SMS 16V M FM5 TP(5)	
		C414	0CQ1021N409	CAPACITOR POLYESTER(MYLAR)	0.001U 100V J POLY TP	
		C415	0CE1066F618	CAPACITOR.ELECTROLYTIC	10M SMS 16V M FM5 TP(5)	

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S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		C420	0CE1066F618	CAPACITOR,ELECTROLYTIC	10M SMS 16V M FM5 TP(5)	
		C421	0CE2256K618	CAPACITOR,ELECTROLYTIC	2.2M SMS 50V M FL TP(5)	
		C422	0CE2256K618	CAPACITOR,ELECTROLYTIC	2.2M SMS 50V M FL TP(5)	
		C424	0CE4766F618	CAPACITOR,ELECTROLYTIC	47M SMS 16V M FL TP(5)	
		C431	0CQ2231N409	CAPACITOR POLYESTER(MYLAR)	0.022U 100V J POLY TP	
		C432	0CE3376F618	CAPACITOR,ELECTROLYTIC	330M SMS 16V M FM5 TP5	
		C433	0CE2256K618	CAPACITOR,ELECTROLYTIC	2.2M SMS 50V M FL TP(5)	
		C441	0CE4756K618	CAPACITOR,ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C444	0CE2256K618	CAPACITOR,ELECTROLYTIC	2.2M SMS 50V M FL TP(5)	
		C445	0CE2256K618	CAPACITOR,ELECTROLYTIC	2.2M SMS 50V M FL TP(5)	
		C446	0CE2256K618	CAPACITOR,ELECTROLYTIC	2.2M SMS 50V M FL TP(5)	
		C451	0CC2210K415	CAPACITOR CERAMIC(TEMP COMP)	220P 50V J NPO TS	
		C501	0CQ4731N409	CAPACITOR POLYESTER(MYLAR)	0.047U 100V J POLY TP	
		C502	0CQ4731N409	CAPACITOR POLYESTER(MYLAR)	0.047U 100V J POLY TP	
		C506	0CE3386H650	CAPACITOR,ELECTROLYTIC	3300M SMS 25V M FM7.5	
		C507	0CE4776H630	CAPACITOR,ELECTROLYTIC	470M SMS 25V M FM5	
		C508	0CE477CF618	CAPACITOR,ELECTROLYTIC	470UF SHL 16V M FL TP5	
		C509	0CE477CF618	CAPACITOR,ELECTROLYTIC	470UF SHL 16V M FL TP5	
		C510	0CK1030K515	CAPACITOR,CERAMIC(HIGH DIELE)	0.01M 50V K B TS	
		C512	0CE2266H618	CAPACITOR,ELECTROLYTIC	22M SMS 25V M FM5 TP(5)	
		C513	0CE1076H618	CAPACITOR,ELECTROLYTIC	100M SMS 25V M FM5 TP(5)	
		C558	0CE477CF618	CAPACITOR,ELECTROLYTIC	470UF SHL 16V M FL TP5	
		C559	0CE477CF618	CAPACITOR,ELECTROLYTIC	470UF SHL 16V M FL TP5	
		D401	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D403	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D404	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D405	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D406	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D407	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D408	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D410	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D412	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D413	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D422	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D424	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D425	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D501	0DD151000FA	DIODE	PBM151,BRID,SILITER,FORMING	
		D502	0DD400109DA	DIODE	1N4001,RECT,ROHM,TP	
		D503	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D504	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D505	0DD400109DA	DIODE	1N4001,RECT,ROHM,TP	
		F501	0FT2000B513	FUSE TIME LAG	0.2A 250V 5.2X20 G SMK	
		F503	0FT4000B513	FUSE,TIME LAG	0.4A 250V 5.2X20 G SMK	
		IC201	0ISA324600A	IC, SANYO	LA3246 PRE AMP P/B SANYO (S)	
		IC202	0IS0110100A	IC,SONY	CXA1101 DOLBY-B	
		IC301	0IS0129800A	IC, SONY	CXA1298AP REC EQ	
		IC302	0INE133000A	IC,NEC	UPC1330HA DECK R/P S/W,NEC	
		JK401	576-002A	JACK RCA	JACK,BLOCK S-437P-4P(WH/RD)(S)	
		LD402	0DL540009AD	DIODE LED	SLR-54GC 80F 215,ROHM	
		LD403	0DL540009AD	DIODE LED	SLR-54GC 80F 215,ROHM	

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S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		LPF240	638N109B	COIL TRAP FM	FB-10D,HKS-931-005,SUMIDA	
		LPF290	638N109B	COIL TRAP FM	FB-10D,HKS-931-005,SUMIDA	
		L201	637-008A	INDUCTOR	R-9124X,33MH(CAP-CORE)	
		L251	637-008A	INDUCTOR	R-9124X,33MH(CAP-CORE)	
		L301	638-601C	COIL TRAP FM	COIL, TRAP 19KHZ (S)	
		L351	638-601C	COIL TRAP FM	COIL, TRAP 19KHZ (S)	
		ZD502	0DZ100009FA	DIODE,ZENER	MTZ10-C T-77 10V TP,ROHM/K	
		ZD503	0DZ680009CC	DIODE,ZENER	MTZ6.8C-T-77 ROHM-K	
		L401	634-600A	COIL OSCILLATOR	TAPE OSC,AUTO TOKO	
		L410	639-003G	INDUCTOR	INDUCTOR, F 1MH (S)	
		PNCN50	561-647C	CONNECTOR	F-WIRE HOLDER MX51052-0300 (S)	
		PN401	561S715C	CONNECTOR	WAFER,GIL-G-3P-S3T2-ES	
		PN402	561S715F	CONNECTOR	WAFER,GIL-G-6P-S3T2-ES	
		PN403	561S715B	CONNECTOR	WAFER,GIL-G-2P-S3T2-ES	
		PN404	L81=H24W	LEAD SET	FLAT UL2877#24-8 240 W/K-K	
		PN404	561-647H	CONNECTOR	F-WIRE HOLDER MX51052-0800 (S)	
		PN408	561S715J	CONNECTOR	WAFER,GIL-G-10P-S3T2-ES	
		PN409	561S715E	CONNECTOR	WAFER,GIL-G-5P-S3T2-ES	
		PN501	L81=C36G	LEAD SET	FLAT UL2877#24-3 360 RD/GY	
		PN501	561-647C	CONNECTOR	F-WIRE HOLDER MX51052-0300 (S)	
		Q201	0TR111009AD	TRANSISTOR	KRC111M TP,KEC	
		Q202	0TR111009AD	TRANSISTOR	KRC111M TP,KEC	
		Q203	0TR111009AD	TRANSISTOR	KRC111M TP,KEC	
		Q204	0TR111009AD	TRANSISTOR	KRC111M TP,KEC	
		Q205	0TR111009AD	TRANSISTOR	KRC111M TP,KEC	
		Q240	0TR319809AD	TRANSISTOR	KTC3198L-GR TP,KEC(KTC732TM)	
		Q251	0TR111009AD	TRANSISTOR	KRC111M TP,KEC	
		Q252	0TR111009AD	TRANSISTOR	KRC111M TP,KEC	
		Q253	0TR111009AD	TRANSISTOR	KRC111M TP,KEC	
		Q254	0TR111009AD	TRANSISTOR	KRC111M TP,KEC	
		Q290	0TR319809AD	TRANSISTOR	KTC3198L-GR TP,KEC(KTC732TM)	
		Q302	0TR111009AD	TRANSISTOR	KRC111M TP,KEC	
		Q352	0TR111009AD	TRANSISTOR	KRC111M TP,KEC	
		Q401	0TR320209AA	TRANSISTOR	KTC3202-TP-Y (KTC1959)KEC	
		Q402	0TR127109AA	TRANSISTOR	KTA1271-TP-Y (KTA950)KEC	
		Q403	0TR111009AD	TRANSISTOR	KRC111M TP,KEC	
		Q404	0TR320209AA	TRANSISTOR	KTC3202-TP-Y (KTC1959)KEC	
		Q405	0TR111009AD	TRANSISTOR	KRC111M TP,KEC	
		Q406	0TR320609AA	TRANSISTOR	KTC3206-TP-0 (KTC2229)KEC	
		Q410	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q411	0TR111009AD	TRANSISTOR	KRC111M TP,KEC	
		Q412	0TR111009AD	TRANSISTOR	KRC111M TP,KEC	
		Q413	0TR111009AD	TRANSISTOR	KRC111M TP,KEC	
		Q414	0TR126609AA	TRANSISTOR	KTA1266-TP-Y (KTA1015) KEC	
		Q415	0TR103009AF	TRANSISTOR	KRA103M TP,KEC(KRA2203)	
		Q416	0TR111009AD	TRANSISTOR	KRC111M TP,KEC	
		Q417	0TR111009AD	TRANSISTOR	KRC111M TP,KEC	
		Q419	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q420	0TR111009AD	TRANSISTOR	KRC111M TP,KEC	
		[illegible]	[illegible]	TRANSISTOR	KTA1266-TP-Y (KTA1015) KEC	

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S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		Q422	0TR102009AF	TRANSISTOR	KRC102M TP,KEC(KRC1202)	
		Q430	0TR111009AD	TRANSISTOR	KRC111M TP,KEC	
		Q431	0TR111009AD	TRANSISTOR	KRC111M TP,KEC	
		Q432	0TR111009AD	TRANSISTOR	KRC111M TP,KEC	
		Q433	0TR111009AD	TRANSISTOR	KRC111M TP,KEC	
		Q461	0TR111009AD	TRANSISTOR	KRC111M TP,KEC	
		Q462	0TR111009AD	TRANSISTOR	KRC111M TP,KEC	
		Q501	0TR880000AG	TRANSISTOR	KTD880A-Y (KTD880) KEC	
		Q502	0TR880000AG	TRANSISTOR	KTD880A-Y (KTD880) KEC	
		Q503	0TR111009AD	TRANSISTOR	KRC111M TP,KEC	
		Q504	0TR103009AF	TRANSISTOR	KRA103M TP,KEC(KRA2203)	
		Q505	0TR111009AD	TRANSISTOR	KRC111M TP,KEC	
		Q506	0TR111009AD	TRANSISTOR	KRC111M TP,KEC	
		Q507	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		R201	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R202	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R203	0RD1500F608	RESISTOR,FIXED CARBON FILM	150 1/6W 5 TA26	
		R204	0RD3903F608	RESISTOR,FIXED CARBON FILM	390K 1/6W 5 TA26	
		R206	0RD1602F608	RESISTOR,FIXED CARBON FILM	16K 1/6W 5 TA26	
		R207	0RD2201F608	RESISTOR,FIXED CARBON FILM	2.2K 1/6W 5 TA26	
		R208	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R209	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R210	0RD5601F608	RESISTOR,FIXED CARBON FILM	5.6K 1/6W 5 TA26	
		R211	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R212	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R213	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R214	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R215	0RD1500F608	RESISTOR,FIXED CARBON FILM	150 1/6W 5 TA26	
		R218	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R219	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R220	0RD3901F608	RESISTOR,FIXED CARBON FILM	3.9K 1/6W 5 TA26	
		R221	0RD2201F608	RESISTOR,FIXED CARBON FILM	2.2K 1/6W 5 TA26	
		R224	0RD8201F608	RESISTOR,FIXED CARBON FILM	8.2K 1/6W 5 TA26	
		R225	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R230	0RD0222F608	RESISTOR,FIXED CARBON FILM	22 1/6W 5 TA26	
		R231	0RD5601F608	RESISTOR,FIXED CARBON FILM	5.6K 1/6W 5 TA26	
		R232	0RD5600F608	RESISTOR,FIXED CARBON FILM	560 1/6W 5 TA26	
		R233	0RD4702F608	RESISTOR,FIXED CARBON FILM	47K 1/6W 5 TA26	
		R234	0RD4302F608	RESISTOR,FIXED CARBON FILM	43K 1/6W 5 TA26	
		R236	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R237	0RD8201F608	RESISTOR,FIXED CARBON FILM	8.2K 1/6W 5 TA26	
		R238	0RD1802F608	RESISTOR,FIXED CARBON FILM	18K 1/6W 5 TA26	
		R239	0RD2202F608	RESISTOR,FIXED CARBON FILM	22K 1/6W 5 TA26	
		R240	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R241	0RD2703F608	RESISTOR,FIXED CARBON FILM	270K 1/6W 5 TA26	
		R242	0RD4702F608	RESISTOR,FIXED CARBON FILM	47K 1/6W 5 TA26	
		R243	0RD2701F608	RESISTOR,FIXED CARBON FILM	2.7K 1/6W 5 TA26	
		R244	0RD8200F608	RESISTOR,FIXED CARBON FILM	820 1/6W 5 TA26	
		R245	0RD5601F608	RESISTOR,FIXED CARBON FILM	5.6K 1/6W 5 TA26	
		R251	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	

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S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		R252	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R253	0RD1500F608	RESISTOR,FIXED CARBON FILM	150 1/6W 5 TA26	
		R254	0RD3903F608	RESISTOR,FIXED CARBON FILM	390K 1/6W 5 TA26	
		R256	0RD1602F608	RESISTOR,FIXED CARBON FILM	16K 1/6W 5 TA26	
		R257	0RD2201F608	RESISTOR,FIXED CARBON FILM	2.2K 1/6W 5 TA26	
		R258	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R259	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R260	0RD5601F608	RESISTOR,FIXED CARBON FILM	5.6K 1/6W 5 TA26	
		R274	0RD8201F608	RESISTOR,FIXED CARBON FILM	8.2K 1/6W 5 TA26	
		R281	0RD5601F608	RESISTOR,FIXED CARBON FILM	5.6K 1/6W 5 TA26	
		R283	0RD2200F608	RESISTOR,FIXED CARBON FILM	220 1/6W 5 TA26	
		R286	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R287	0RD8201F608	RESISTOR,FIXED CARBON FILM	8.2K 1/6W 5 TA26	
		R288	0RD1802F608	RESISTOR,FIXED CARBON FILM	18K 1/6W 5 TA26	
		R289	0RD2202F608	RESISTOR,FIXED CARBON FILM	22K 1/6W 5 TA26	
		R290	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R291	0RD2703F608	RESISTOR,FIXED CARBON FILM	270K 1/6W 5 TA26	
		R292	0RD4702F608	RESISTOR,FIXED CARBON FILM	47K 1/6W 5 TA26	
		R293	0RD2701F608	RESISTOR,FIXED CARBON FILM	2.7K 1/6W 5 TA26	
		R294	0RD8200F608	RESISTOR,FIXED CARBON FILM	820 1/6W 5 TA26	
		R295	0RD5601F608	RESISTOR,FIXED CARBON FILM	5.6K 1/6W 5 TA26	
		R310	0RD1000F608	RESISTOR,FIXED CARBON FILM	100 1/6W 5 TA26	
		R311	0RD2402F608	RESISTOR,FIXED CARBON FILM	24K 1/6W 5 TA26	
		R314	0RD1000F608	RESISTOR,FIXED CARBON FILM	100 1/6W 5 TA26	
		R315	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R316	0RD3900F608	RESISTOR,FIXED CARBON FILM	390 1/6W 5 TA26	
		R317	0RD5601F608	RESISTOR,FIXED CARBON FILM	5.6K 1/6W 5 TA26	
		R320	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R323	0RD1503F608	RESISTOR,FIXED CARBON FILM	150K 1/6W 5 TA26	
		R330	0RD3302F608	RESISTOR,FIXED CARBON FILM	33K 1/6W 5 TA26	
		R331	0RD1802F608	RESISTOR,FIXED CARBON FILM	18K 1/6W 5 TA26	
		R332	0RD2702F608	RESISTOR,FIXED CARBON FILM	27K 1/6W 5 TA26	
		R333	0RD6801F608	RESISTOR,FIXED CARBON FILM	6.8K 1/6W 5 TA26	
		R334	0RD2702F608	RESISTOR,FIXED CARBON FILM	27K 1/6W 5 TA26	
		R335	0RD6801F608	RESISTOR,FIXED CARBON FILM	6.8K 1/6W 5 TA26	
		R336	0RD8203F608	RESISTOR,FIXED CARBON FILM	820K 1/6W 5 TA26	
		R337	0RD1000F608	RESISTOR,FIXED CARBON FILM	100 1/6W 5 TA26	
		R338	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R339	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R354	0RD1000F608	RESISTOR,FIXED CARBON FILM	100 1/6W 5 TA26	
		R355	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R356	0RD3900F608	RESISTOR,FIXED CARBON FILM	390 1/6W 5 TA26	
		R357	0RD5601F608	RESISTOR,FIXED CARBON FILM	5.6K 1/6W 5 TA26	
		R360	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R363	0RD1503F608	RESISTOR,FIXED CARBON FILM	150K 1/6W 5 TA26	
		R401	0RD2702F608	RESISTOR,FIXED CARBON FILM	27K 1/6W 5 TA26	
		R402	0RD0682F608	RESISTOR,FIXED CARBON FILM	68 1/6W 5 TA26	
		R403	0RD1802F608	RESISTOR,FIXED CARBON FILM	18K 1/6W 5 TA26	
		R405	0RD0272F608	RESISTOR,FIXED CARBON FILM	27 1/6W 5 TA26	
		R406	0RD0681F608	RESISTOR,FIXED CARBON FILM	6.8 1/6W 5 TA26	

「REPLACEMENT PARTS LIST」

PAGE : 8

RUN-DATE : 93.05.26

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		R407	0RD1802F608	RESISTOR,FIXED CARBON FILM	18K 1/6W 5 TA26	
		R408	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R416	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R417	0RD1502F608	RESISTOR,FIXED CARBON FILM	15K 1/6W 5 TA26	
		R418	0RD1502F608	RESISTOR,FIXED CARBON FILM	15K 1/6W 5 TA26	
		R420	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R421	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R422	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R423	0RD3301F608	RESISTOR,FIXED CARBON FILM	3.3K 1/6W 5 TA26	
		R424	0RD1501F608	RESISTOR,FIXED CARBON FILM	1.5K 1/6W 5 TA26	
		R425	0RD1501F608	RESISTOR,FIXED CARBON FILM	1.5K 1/6W 5 TA26	
		R426	0RD5602F608	RESISTOR,FIXED CARBON FILM	56K 1/6W 5 TA26	
		R427	0RD3901F608	RESISTOR,FIXED CARBON FILM	3.9K 1/6W 5 TA26	
		R428	0RD1500F608	RESISTOR,FIXED CARBON FILM	150 1/6W 5 TA26	
		R429	0RD2202F608	RESISTOR,FIXED CARBON FILM	22K 1/6W 5 TA26	
		R430	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R433	0RD1501F608	RESISTOR,FIXED CARBON FILM	1.5K 1/6W 5 TA26	
		R434	0RD2201F608	RESISTOR,FIXED CARBON FILM	2.2K 1/6W 5 TA26	
		R435	0RD2202F608	RESISTOR,FIXED CARBON FILM	22K 1/6W 5 TA26	
		R437	0RD2201F608	RESISTOR,FIXED CARBON FILM	2.2K 1/6W 5 TA26	
		R441	0RD1802F608	RESISTOR,FIXED CARBON FILM	18K 1/6W 5 TA26	
		R442	0RD2202F608	RESISTOR,FIXED CARBON FILM	22K 1/6W 5 TA26	
		R443	0RD2202F608	RESISTOR,FIXED CARBON FILM	22K 1/6W 5 TA26	
		R444	0RD2202F608	RESISTOR,FIXED CARBON FILM	22K 1/6W 5 TA26	
		R445	0RD2202F608	RESISTOR,FIXED CARBON FILM	22K 1/6W 5 TA26	
		R446	0RD8200F608	RESISTOR,FIXED CARBON FILM	820 1/6W 5 TA26	
		R447	0RD1501F608	RESISTOR,FIXED CARBON FILM	1.5K 1/6W 5 TA26	
		R470	0RD4700F608	RESISTOR,FIXED CARBON FILM	470 1/6W 5 TA26	
		R471	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R473	0RD0102F608	RESISTOR,FIXED CARBON FILM	10 1/6W 5 TA26	
		R474	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R475	0RD4700F608	RESISTOR,FIXED CARBON FILM	470 1/6W 5 TA26	
		R476	0RD0102F608	RESISTOR,FIXED CARBON FILM	10 1/6W 5 TA26	
		R477	0RD1000F608	RESISTOR,FIXED CARBON FILM	100 1/6W 5 TA26	
		R478	0RD2202F608	RESISTOR,FIXED CARBON FILM	22K 1/6W 5 TA26	
		R504	0RD4700F608	RESISTOR,FIXED CARBON FILM	470 1/6W 5 TA26	
		R505	0RD4700F608	RESISTOR,FIXED CARBON FILM	470 1/6W 5 TA26	
		R506	0RD2701F608	RESISTOR,FIXED CARBON FILM	2.7K 1/6W 5 TA26	
		R507	0RD2701F608	RESISTOR,FIXED CARBON FILM	2.7K 1/6W 5 TA26	
		R508	0RD3902F608	RESISTOR,FIXED CARBON FILM	39K 1/6W 5 TA26	
		R509	0RD0102F608	RESISTOR,FIXED CARBON FILM	10 1/6W 5 TA26	
		R510	0RD5602F608	RESISTOR,FIXED CARBON FILM	56K 1/6W 5 TA26	
		R511	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R512	0RD5602F608	RESISTOR,FIXED CARBON FILM	56K 1/6W 5 TA26	
		R513	0RD5602F608	RESISTOR,FIXED CARBON FILM	56K 1/6W 5 TA26	
		SW410	554-635A	SWITCH PUSH	SPPH121AP013	
		SW411	554-635A	SWITCH PUSH	SPPH121AP013	
		SW413	554-635A	SWITCH PUSH	SPPH121AP013	
		SW414	554-635A	SWITCH PUSH	SPPH121AP013	
		SW502	554-635A	SWITCH PUSH	SPPH121AP013	

「REPLACEMENT PARTS LIST」

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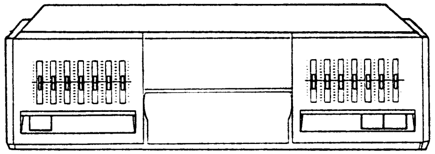
RUN-DATE : 93.05.26

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		SW503	552-020A	SWITCH SLIDE	,SLIDE 00120050B(N) L8N	
		TP40	561S715B	CONNECTOR	WAFER,GIL-G-2P-S3T2-ES	
		TP45	561S715C	CONNECTOR	WAFER,GIL-G-3P-S3T2-ES	
		T501	641-841Z	TRANS POWER	115/230V 50/60HZ,DECK YS/NY	
		VR201	613S008A	RESISTOR SEMI-FIXED	EVN-D8N A02 BQ3 (4.7KB) STICK	
		VR202	613S008A	RESISTOR SEMI-FIXED	EVN-D8N A02 BQ3 (4.7KB) STICK	
		VR251	613S008A	RESISTOR SEMI-FIXED	EVN-D8N A02 BQ3 (4.7KB) STICK	
		VR252	613S008A	RESISTOR SEMI-FIXED	EVN-D8N A02 BQ3 (4.7KB) STICK	
		VR301	613S008D	RESISTOR SEMI-FIXED	EVN-D8N A02 B14 (10KB) STICK	
		VR351	613S008D	RESISTOR SEMI-FIXED	EVN-D8N A02 B14 (10KB) STICK	
		VR401	613S008F	RESISTOR SEMI-FIXED	EVA-D8N A02 B15 (100KB) STICK	
		VR410	613S008B	RESISTOR SEMI-FIXED	EVN-D8N A02 B13 (1KB) STICK	
		VR451	613S008F	RESISTOR SEMI-FIXED	EVA-D8N A02 B15 (100KB) STICK	
		ZD201	0DZ620009EA	DIODE,ZENER	MTZ6.2-B T-77 6.2V TP,ROHM/K	
		ZD501	0DZ100009FA	DIODE,ZENER	MTZ10-C T-77 10V TP,ROHM/K	
				*** END OF DATA ***		

GRAPHIC EQUALIZER



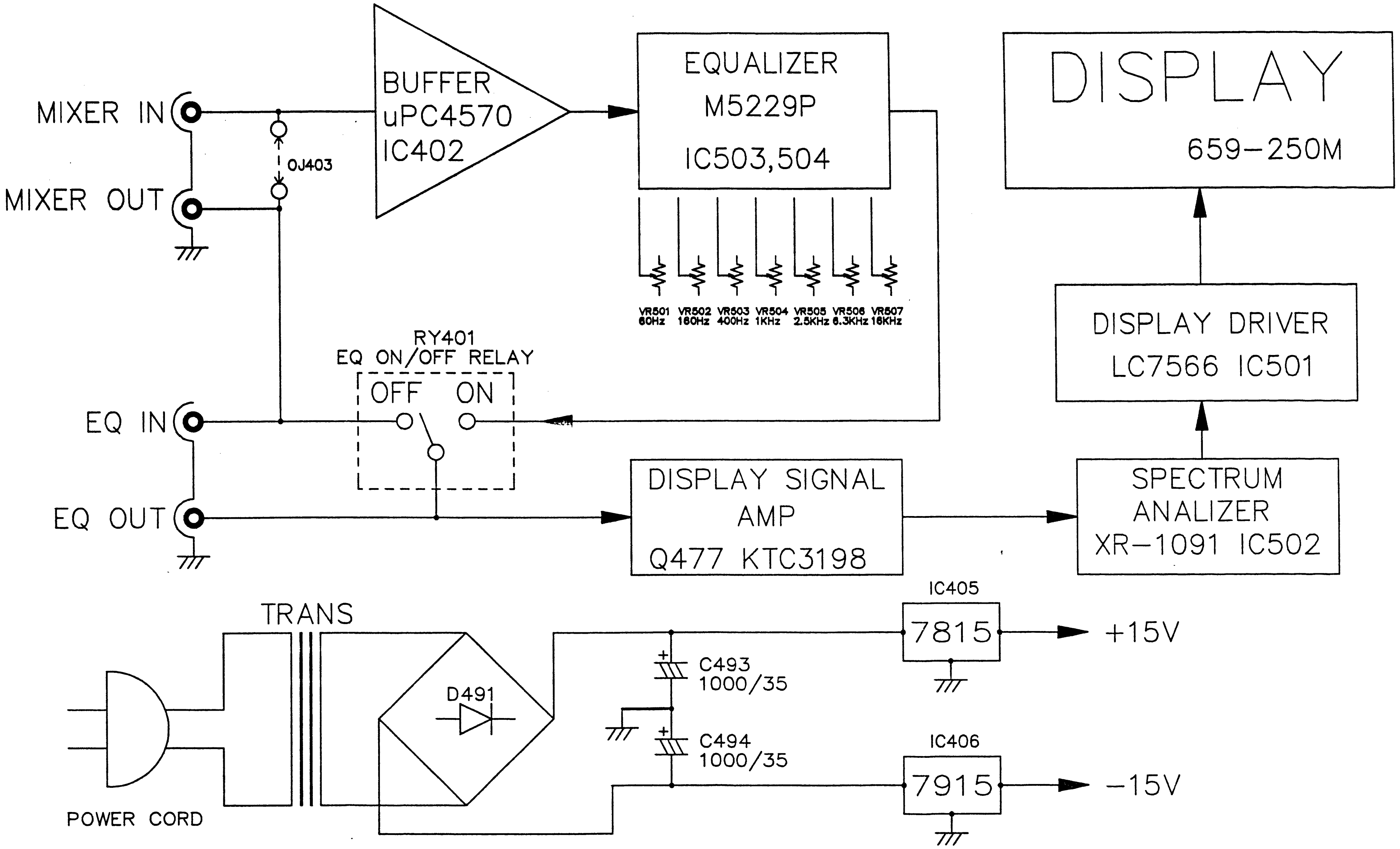
MODEL: EQ4335

SPECIFICATIONS

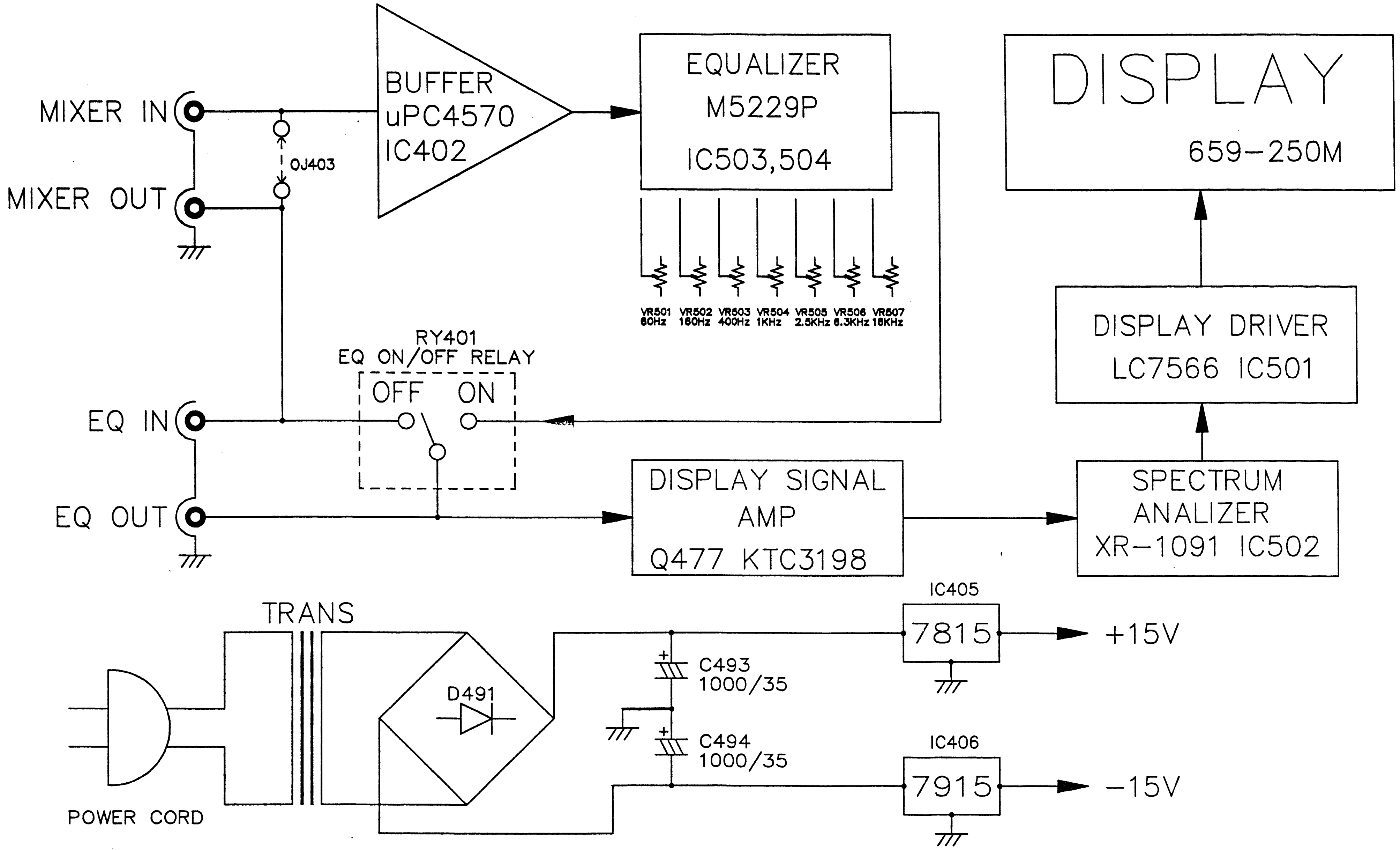
1) EQ Variable Range Ratio	±10dB
2) Center Frequency Error	±5%
3) T.H.D.	0.002%
4) Inter Modulation Distortion	0.002%
5) Frequency Response (−3dB)	5Hz~65 kHz
6) Signal-to-noise Ratio	110dB
7) Channel Cross Talk 1 kHz/10 kHz	75dB/70dB
8) Channel Difference	±0.5dB
9) Power Requirement	AC 230V, 50Hz
10) Dimension (W x H x D)	376 x 130 x 312 (mm)
11) Weight	3.7 kg

NOTE: Specifications are subject to change without notice for improvement.

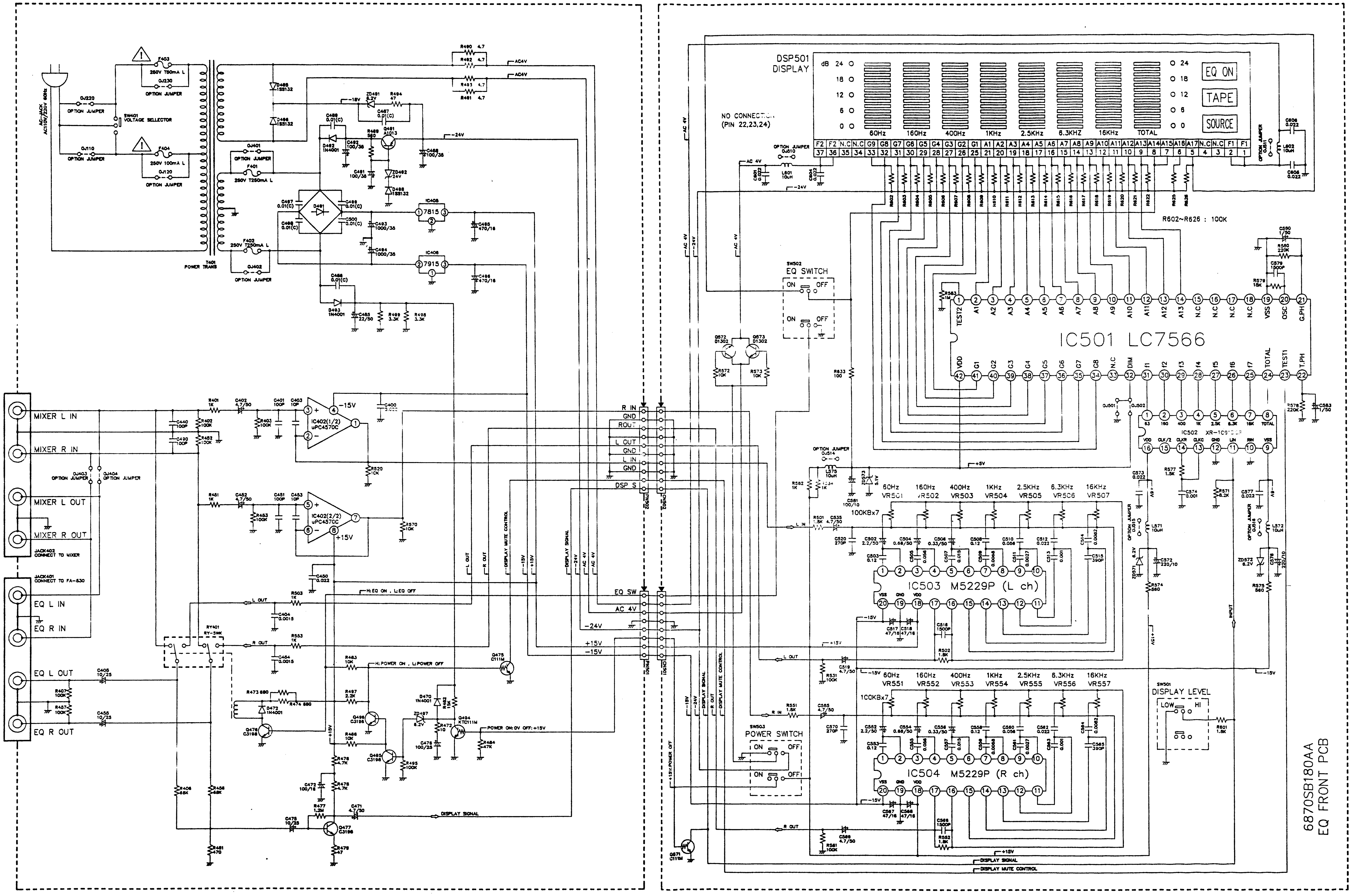
BLOCK DIAGRAM


MIXER IN
MIXER OUT
OJ403
BUFFER
uPC4570
IC402
EQUALIZER
M5229P
IC503,504
VR501
60Hz
VR502
160Hz
VR503
400Hz
VR504
1KHz
VR505
2.5KHz
VR506
6.3KHz
VR507
16KHz
DISPLAY
659–250M
DISPLAY DRIVER
LC7566 IC501
RY401
EQ ON/OFF RELAY
OFF
ON
EQ IN
EQ OUT
DISPLAY SIGNAL
AMP
Q477 KTC3198
SPECTRUM
ANALIZER
XR–1091 IC502
TRANS
D491
POWER CORD
C493
1000/35
C494
1000/35
IC405
7815
+15V
IC406
7915
–15V

BLOCK DIAGRAM

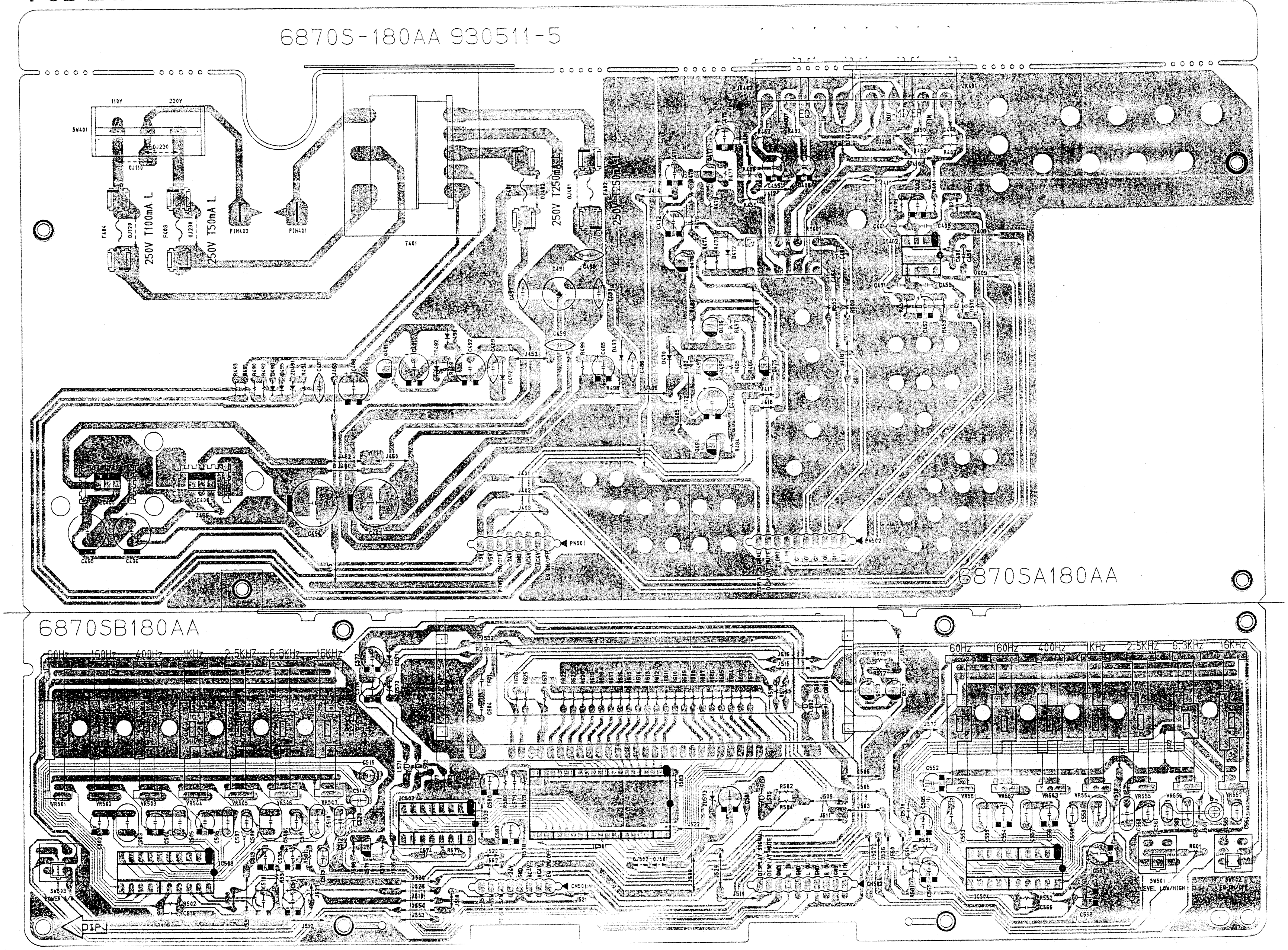

MIXER IN
MIXER OUT
OJ403
BUFFER
uPC4570
IC402
EQUALIZER
M5229P
IC503,504
VR501 60Hz
VR502 160Hz
VR503 400Hz
VR504 1KHz
VR505 2.5KHz
VR506 6.3KHz
VR507 16KHz
DISPLAY
659–250M
DISPLAY DRIVER
LC7566 IC501
RY401
EQ ON/OFF RELAY
OFF
ON
EQ IN
EQ OUT
DISPLAY SIGNAL AMP
Q477 KTC3198
SPECTRUM ANALIZER
XR–1091 IC502
TRANS
D491
C493 1000/35
C494 1000/35
IC405
7815
+15V
IC406
7915
–15V
POWER CORD

SCHEMATIC DIAGRAM

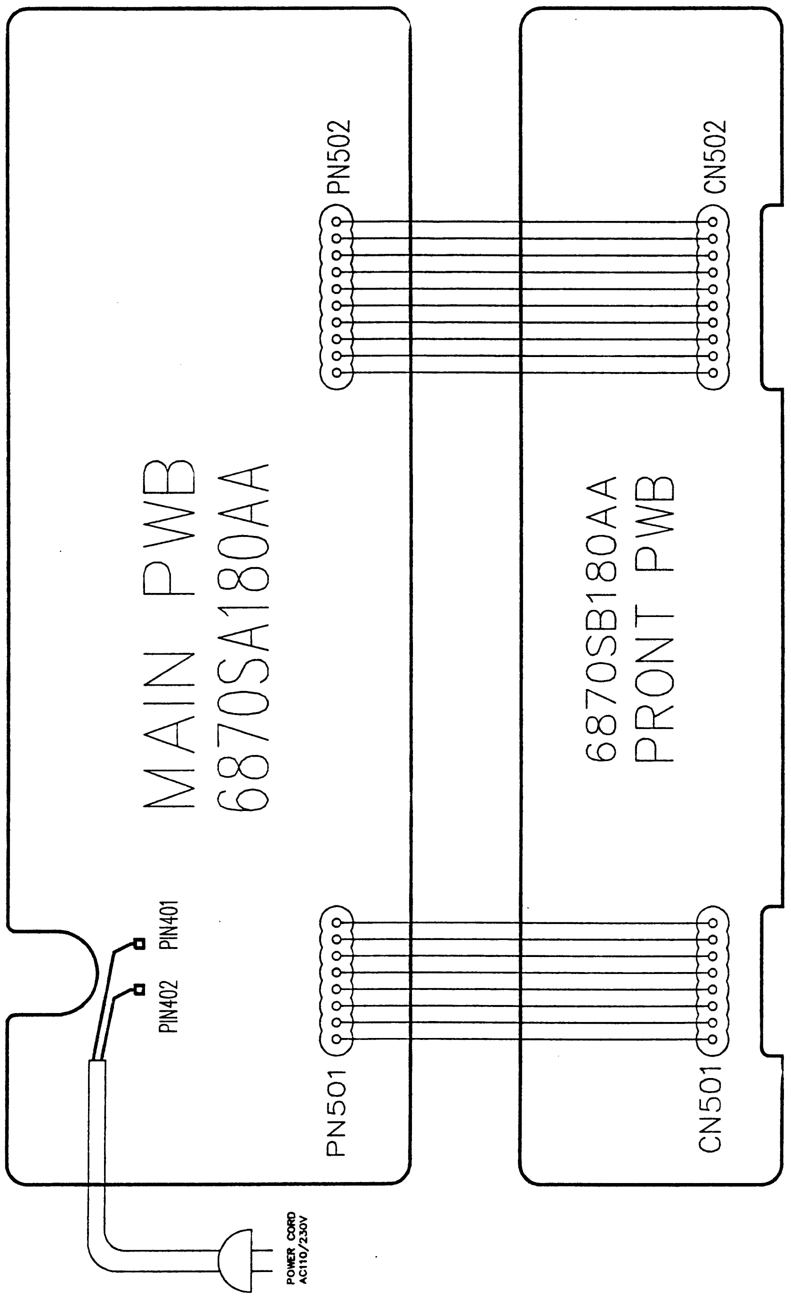

AC-JACK AC110V/220V 60Hz
OPTION JUMPER
SW401 VOLTAGE SELLECTOR
F403 250V 750mA L
F404 250V 100mA L
F401 250V T250mA L
F402 250V T250mA L
T401 POWER TRANS
7815
7915
-15V
-24V
AC4V
MIXER L IN
MIXER R IN
MIXER L OUT
MIXER R OUT
JACK402 CONNECT TO MIXER
JACK401 CONNECT TO FA-630
EQ L IN
EQ R IN
EQ L OUT
EQ R OUT
IC402(1/2) uPC4570C
IC402(2/2) uPC4570C
+15V
RY401 RY-5WK
H: EQ ON , L: EQ OFF
H: POWER ON , L: POWER OFF
POWER ON: 0V OFF: +15V
DISPLAY SIGNAL
R IN
GND
R OUT
L OUT
L IN
DSP S
EQ SW
AC 4V
-24V
+15V
-15V
DSP501 DISPLAY
NO CONNECTION (PIN 22,23,24)
dB 24 18 12 6 0
60Hz
160Hz
400Hz
1KHz
2.5KHz
6.3KHZ
16KHz
TOTAL
EQ ON
TAPE
SOURCE
R602~R626 : 100K
SW502 EQ SWITCH
ON OFF
IC501 LC7566
IC502 XR-1075
VR501 VR502 VR503 VR504 VR505 VR506 VR507
100KBx7
IC503 M5229P (L ch)
VR551 VR552 VR553 VR554 VR555 VR556 VR557
IC504 M5229P (R ch)
SW503 POWER SWITCH
SW301 DISPLAY LEVEL
LOW HI
DISPLAY MUTE CONTROL
6870SB180AA
EQ FRONT PCB

NOTES: 1. Resistance values are indicated in ohms unless otherwise specified (K=1000, M=1,000,000)
2. Capacitance values are shown in microfarads unless otherwise (P=MICRO-MICRO FARADS)

PCB LAYOUT

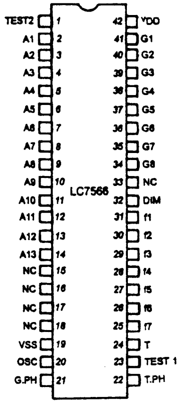

6870S-180AA 930511-5
110V
220V
SW401
250V T100mA L
250V T50mA L
250V T250mA L
F404
F403
PIN402
PIN401
T401
EQ
MIXER
IC402
IC404
PN501
PN502
6870SA180AA
6870SB180AA
60Hz
160Hz
400Hz
1KHz
2.5KHZ
6.3KHz
16KHz
SW503
POWER H/W
D1P
SW501
LEVEL LOW/HIGH
SW502
EQ ON/OFF
IC502
IC501
IC504
VR501
VR502
VR503
VR504
VR505
VR506
VR551
VR552
VR553
VR554
VR555
VR556
VR557
CN501
CN502

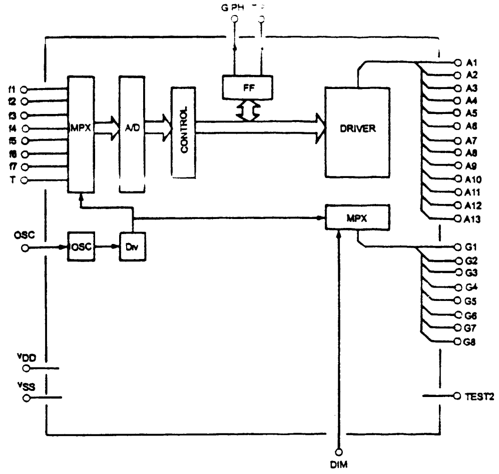
WIRING DIAGRAM


PN502
CN502
MAIN PWB
6870SA180AA
6870SB180AA
FRONT PWB
PIN401
PIN402
PN501
CN501
POWER CORD
AC110/230V

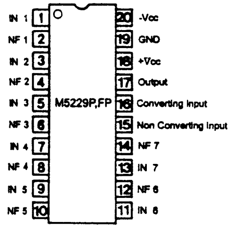
INTERNAL BLOCK DIAGRAM OF ICs

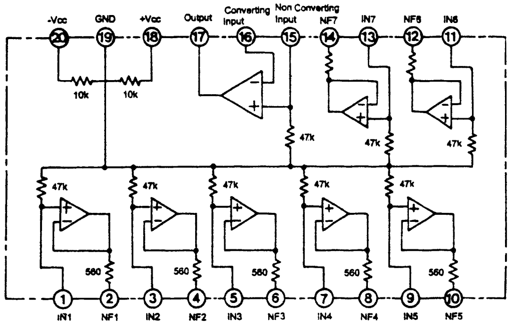
LC7566


TEST2 1
A1 2
A2 3
A3 4
A4 5
A5 6
A6 7
A7 8
A8 9
A9 10
A10 11
A11 12
A12 13
A13 14
NC 15
NC 16
NC 17
NC 18
VSS 19
OSC 20
G.PH 21
LC7566
42 VDD
41 G1
40 G2
39 G3
38 G4
37 G5
36 G6
35 G7
34 G8
33 NC
32 DIM
31 f1
30 f2
29 f3
28 f4
27 f5
26 f6
25 f7
24 T
23 TEST 1
22 T.PH

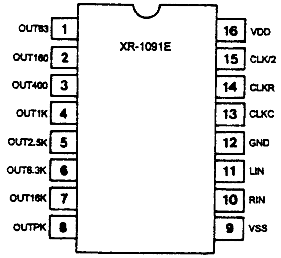

G PH
f1
f2
f3
f4
f5
f6
f7
T
MPX
A/D
CONTROL
FF
DRIVER
MPX
OSC
OSC
Div
VDD
VSS
DIM
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
A13
G1
G2
G3
G4
G5
G6
G7
G8
TEST2

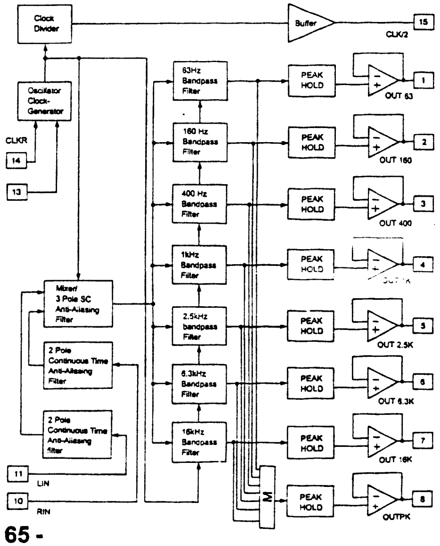
M5229P, FP


IN 1 1
NF 1 2
IN 2 3
NF 2 4
IN 3 5
NF 3 6
IN 4 7
NF 4 8
IN 5 9
NF 5 10
M5229P,FP
20 -Vcc
19 GND
18 +Vcc
17 Output
16 Converting Input
15 Non Converting Input
14 NF 7
13 IN 7
12 NF 6
11 IN 6

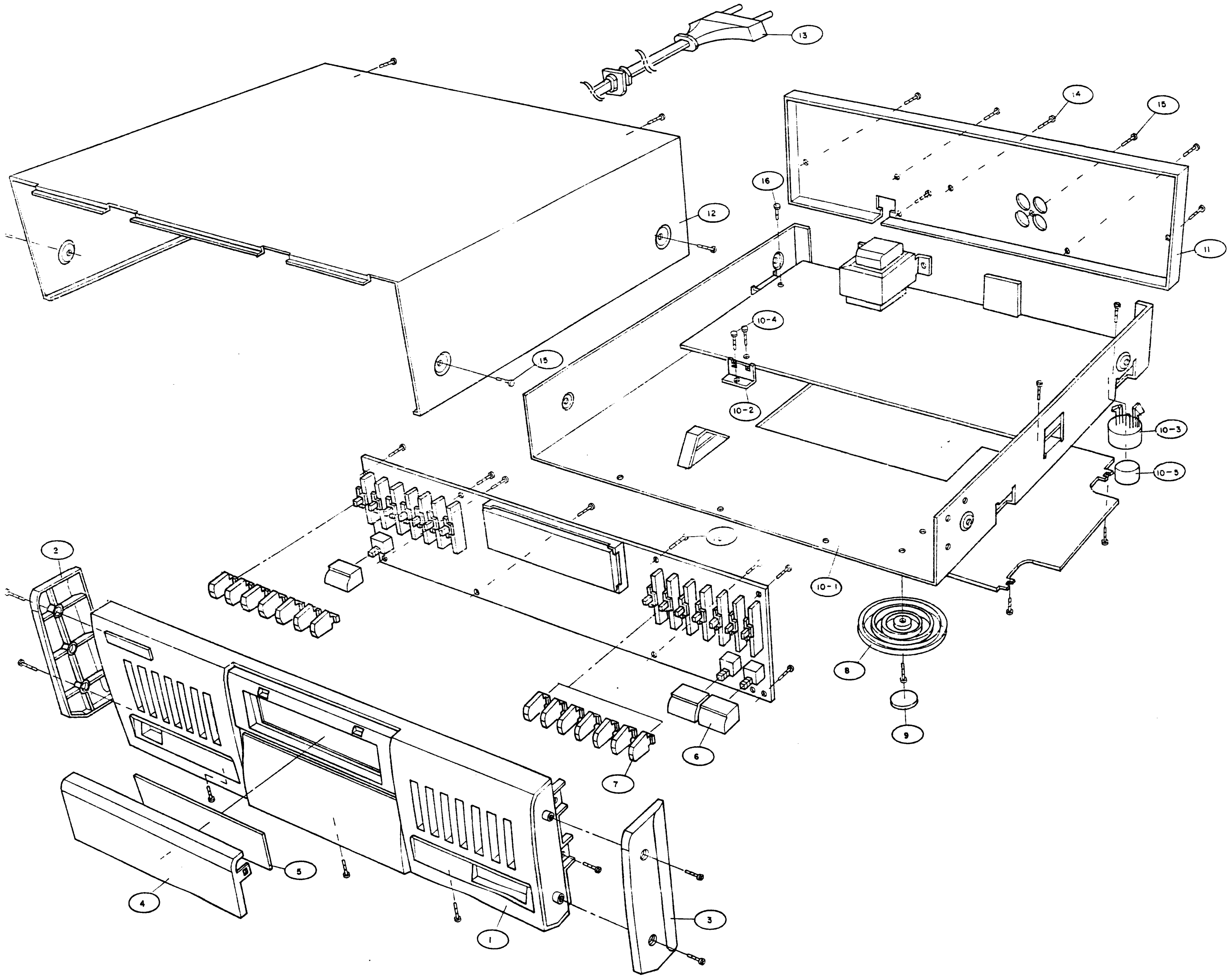

-Vcc
GND
+Vcc
Output
Converting Input
Non Converting Input
NF7
IN7
NF6
IN6
20
19
18
17
16
15
14
13
12
11
10k
10k
47k
47k
47k
47k
47k
47k
47k
47k
560
560
560
560
560
1
2
3
4
5
6
7
8
9
10
IN1
NF1
IN2
NF2
IN3
NF3
IN4
NF4
IN5
NF5

XR-1091E


OUT63 1
OUT160 2
OUT400 3
OUT1K 4
OUT2.5K 5
OUT6.3K 6
OUT16K 7
OUTPK 8
XR-1091E
16 VDD
15 CLK/2
14 CLKR
13 CLKC
12 GND
11 LIN
10 RIN
9 VSS


Clock Divider
Buffer
15
CLK/2
Oscillator Clock-Generator
CLKR
14
13
63Hz Bandpass Filter
160 Hz Bandpass Filter
400 Hz Bandpass Filter
1kHz Bandpass Filter
2.5kHz bandpass Filter
6.3kHz Bandpass Filter
16kHz Bandpass Filter
Mixer/ 3 Pole SC Anti-Aliasing Filter
2 Pole Continuous Time Anti-Aliasing Filter
2 Pole Continuous Time Anti-Aliasing filter
11
LIN
10
RIN
M
PEAK HOLD
1
OUT 63
2
OUT 160
3
OUT 400
4
5
OUT 2.5K
6
OUT 6.3K
7
OUT 16K
8
OUTPK

EXPLODED VIEW/PARTS LIST



REF. NO.	PART NO.	DESCRIPTION	Q'TY
1	3720S-0043B	Panel, Front	1
2	246-518B	Decoration, Side (B) – L	1
3	246-519B	Decoration, Side (B) – R	1
4	236-944A	Window, Display	1
5	231-236A	Sheet, Filter	1
6	4940S-0216A	Knob, Push	3
7	4940S-0225A	Knob, EQ	14
8	265-021A	Foot, Front	2
9	472-190C	Felt	2
10	3141SU0018B	Chassis Assembly, Main	1
10-1	3140S-0018B	Chassis, Main	1
10-2	4810S-0505A	Bracket, PCB	1
10-3	265-004A	Foot, Rubber	2
10-4	1TRL0302016	Screw, 3x6	2
10-5	472-610F	Felt	2
11	3720S-0058B	Panel, Back	1
12	213-533A	Cabinet, Top	1
13	681-005A	Cord, Power	1
14	353-070C	Screw, 4x12	2
15	353-025C	Screw, Special 3x10	25
16	1TRL0302018	Screw, 3x6	10

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
			1TRL0302016	BRAIZER HEAD TA SCREW + 2 CUT	D 3.0 L 6.0 MSWR3/(BK)	
			213-533A	CABINET	TOP (FT-532 BG1)	
			231-236A	SHEET	FILTER (FQ-532 BG1)	
			236-944A	WINDOW	DISPLAY (FQ-532 BG1)	
			246-518B	DECORATION	SIDE(B)-L (FT-532L BU2)	
			246-519B	DECORATION	SIDE(B)-R (FT-532L BU2)	
			265-021A	FOOT	FRONT (FA-532 BG1)	
			265-022A	FOOT	RUBBER (FA-532 BG1)	
			3140S-0018B	CHASSIS	MAIN (FT-532)	
			3141SU0018B	CHASSIS ASSY	MAIN (FT-532)	
			324-799A	HOLDER	FIP (FQ-532 BG1)	
			353-070C	SCREW	* TAPPING,WASHER 4X12 FBK	
			3720S-0043B	PANEL	FRONT (FQ-532 BU2)	
			3720S-0058B	PANEL	BACK (FQ-532 BU2)	
			3875S-5034A	MANUAL, OPERATION ASSY	FQ-532 BU2	
			3890S-C035E	BOX	(FQ-532 BU2)	
			472-190C	FELT		
			4810S-0505A	BRACKET	PCB (FT-532 BG1)	
			4940S-0216A	KNOB	PUSH(FA-532 BG1)	
			4940S-0225A	KNOB	EQ (FQ-532L BG1)	
			564-017E	PLUG CONTACT CORD,PHONE	700M/M NON UL	
			586-001C	FUSE HOLDER	PIN-T 5X20 KS (S)	
			681-005A	CORD POWER	681-004F+B172 KDK	
			6871S-180AA	PWB ASSY	FQ-532	
			6871SA180AA	PWB ASSY	FQ-532 (MAIN)	
			6871SB180AA	PWB ASSY	FQ-532 (FRONT)	
		CN501	561-647H	CONNECTOR	F-WIRE HOLDER MX51052-0800 (S)	
		CN502	561-647J	CONNECTOR	F-WIRE HOLDER MX51052-1000 (S)	
		C400	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C401	0CN1010K518	CAPACITOR TUBULA(HIGH DIELE)	100P 50V K B TA26	
		C402	0CE4756K618	CAPACITOR,ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C403	0CX1000K418	CAPACITOR TUBULA(T.C)	10P 50V J NPO TA26	
		C404	0CN1520F568	CAPACITOR TUBULA(HIGH DIELE)	1500P 16V K X TA26	
		C405	0CE1066H618	CAPACITOR,ELECTROLYTIC	10M SMS 25V M FM5 TP(5)	
		C440	0CN1010K518	CAPACITOR TUBULA(HIGH DIELE)	100P 50V K B TA26	
		C450	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C451	0CN1010K518	CAPACITOR TUBULA(HIGH DIELE)	100P 50V K B TA26	
		C452	0CE4756K618	CAPACITOR,ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C453	0CX1000K418	CAPACITOR TUBULA(T.C)	10P 50V J NPO TA26	
		C454	0CN1520F568	CAPACITOR TUBULA(HIGH DIELE)	1500P 16V K X TA26	
		C455	0CE1066H618	CAPACITOR,ELECTROLYTIC	10M SMS 25V M FM5 TP(5)	
		C471	0CE4756K618	CAPACITOR,ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C472	0CE1076F618	CAPACITOR,ELECTROLYTIC	100M SMS 16V M FM5 TP(5)	
		C475	0CE1066H618	CAPACITOR,ELECTROLYTIC	10M SMS 25V M FM5 TP(5)	
		C476	0CE1076H618	CAPACITOR,ELECTROLYTIC	100M SMS 25V M FM5 TP(5)	
		C485	0CE2266K618	CAPACITOR,ELECTROLYTIC	22M SMS 50V M FM5 TP(5)	
		C486	0CK1030K945	CAPACITOR,CERAMIC(HIGH DIELEC)	0.01UF 50V Z F TS	
		C487	0CK1030K945	CAPACITOR,CERAMIC(HIGH DIELEC)	0.01UF 50V Z F TS	
		C488	0CE1076J618	CAPACITOR,ELECTROLYTIC	100UF SMS 35V M FM(5) TP(5)	
		C489	0CK1030K945	CAPACITOR,CERAMIC(HIGH DIELEC)	0.01UF 50V Z F TS	

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		C490	0CN1010K518	CAPACITOR TUBULA(HIGH DIELE)	100P 50V K B TA26	
		C491	0CE1076J618	CAPACITOR,ELECTROLYTIC	100UF SMS 35V M FM(5) TP(5)	
		C492	0CE1076J618	CAPACITOR,ELECTROLYTIC	100UF SMS 35V M FM(5) TP(5)	
		C493	0CE1086J630	CAPACITOR,ELECTROLYTIC	1000UF SMS 35V M FM5 BULK	
		C494	0CE1086J630	CAPACITOR,ELECTROLYTIC	1000UF SMS 35V M FM5 BULK	
		C495	0CE477CF618	CAPACITOR,ELECTROLYTIC	470UF SHL 16V M FL TP5	
		C496	0CE477CF618	CAPACITOR,ELECTROLYTIC	470UF SHL 16V M FL TP5	
		C497	0CK1030K945	CAPACITOR,CERAMIC(HIGH DIELEC)	0.01UF 50V Z F TS	
		C498	0CK1030K945	CAPACITOR,CERAMIC(HIGH DIELEC)	0.01UF 50V Z F TS	
		C499	0CK1030K945	CAPACITOR,CERAMIC(HIGH DIELEC)	0.01UF 50V Z F TS	
		C500	0CK1030K945	CAPACITOR,CERAMIC(HIGH DIELEC)	0.01UF 50V Z F TS	
		C502	0CE2256K618	CAPACITOR,ELECTROLYTIC	2.2M SMS 50V M FL TP(5)	
		C503	0CQ1242N409	CAPACITOR POLYESTER(MYLAR)	0.12UU S 100V J POLY TP	
		C504	0CE6846K618	CAPACITOR,ELECTROLYTIC	0.68M SMS 50V M FL TP(5)	
		C505	0CQ5631N409	CAPACITOR POLYESTER(MYLAR)	0.056U 100V J POLY TP	
		C506	0CE3346K618	CAPACITOR,ELECTROLYTIC	0.33M SMS 50V M FL TP(5)	
		C507	0CQ1531N409	CAPACITOR POLYESTER(MYLAR)	0.015U 100V J POLY TP	
		C508	0CQ1242N409	CAPACITOR POLYESTER(MYLAR)	0.12UU S 100V J POLY TP	
		C509	0CQ6821N409	CAPACITOR POLYESTER(MYLAR)	0.0068U 100V J POLY TP	
		C510	0CQ5631N409	CAPACITOR POLYESTER(MYLAR)	0.056U 100V J POLY TP	
		C511	0CQ2721N409	CAPACITOR POLYESTER(MYLAR)	0.0027M 100V J POLY TP	
		C512	0CQ2231N409	CAPACITOR POLYESTER(MYLAR)	0.022U 100V J POLY TP	
		C513	0CQ1021N409	CAPACITOR POLYESTER(MYLAR)	0.001U 100V J POLY TP	
		C514	0CQ8221N409	CAPACITOR POLYESTER(MYLAR)	0.0082U 100V J POLY TP	
		C515	0CY3910K499	CAPACITOR,POLYESTYROL	390PF 50V J PSR-HT TP	
		C516	0CN1520F568	CAPACITOR TUBULA(HIGH DIELE)	1500P 16V K X TA26	
		C517	0CE4766F618	CAPACITOR,ELECTROLYTIC	47M SMS 16V M FL TP(5)	
		C518	0CE4766F618	CAPACITOR,ELECTROLYTIC	47M SMS 16V M FL TP(5)	
		C519	0CE4756K618	CAPACITOR,ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C520	0CN2710K518	CAPACITOR TUBULA(HIGH DIELE)	270P 50V K B TA26	
		C535	0CE4756K618	CAPACITOR,ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C552	0CE2256K618	CAPACITOR,ELECTROLYTIC	2.2M SMS 50V M FL TP(5)	
		C553	0CQ1242N409	CAPACITOR POLYESTER(MYLAR)	0.12UU S 100V J POLY TP	
		C554	0CE6846K618	CAPACITOR,ELECTROLYTIC	0.68M SMS 50V M FL TP(5)	
		C555	0CQ5631N409	CAPACITOR POLYESTER(MYLAR)	0.056U 100V J POLY TP	
		C556	0CE3346K618	CAPACITOR,ELECTROLYTIC	0.33M SMS 50V M FL TP(5)	
		C557	0CQ1531N409	CAPACITOR POLYESTER(MYLAR)	0.015U 100V J POLY TP	
		C558	0CQ1242N409	CAPACITOR POLYESTER(MYLAR)	0.12UU S 100V J POLY TP	
		C559	0CQ6821N409	CAPACITOR POLYESTER(MYLAR)	0.0068U 100V J POLY TP	
		C560	0CQ5631N409	CAPACITOR POLYESTER(MYLAR)	0.056U 100V J POLY TP	
		C561	0CQ2721N409	CAPACITOR POLYESTER(MYLAR)	0.0027M 100V J POLY TP	
		C562	0CQ2231N409	CAPACITOR POLYESTER(MYLAR)	0.022U 100V J POLY TP	
		C563	0CQ1021N409	CAPACITOR POLYESTER(MYLAR)	0.001U 100V J POLY TP	
		C564	0CQ8221N409	CAPACITOR POLYESTER(MYLAR)	0.0082U 100V J POLY TP	
		C565	0CY3910K499	CAPACITOR,POLYESTYROL	390PF 50V J PSR-HT TP	
		C566	0CN1520F568	CAPACITOR TUBULA(HIGH DIELE)	1500P 16V K X TA26	
		C567	0CE4766F618	CAPACITOR,ELECTROLYTIC	47M SMS 16V M FL TP(5)	
		C568	0CE4766F618	CAPACITOR,ELECTROLYTIC	47M SMS 16V M FL TP(5)	
		C569	0CE4756K618	CAPACITOR,ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C570	0CN2710K518	CAPACITOR TUBULA(HIGH DIELE)	270P 50V K B TA26	

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S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		C572	0CE2276D618	CAPACITOR,ELECTROLYTIC	220M SMS 10V M FM5 TP(5)	
		C573	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C574	0CN1020K518	CAPACITOR TUBULA(HIGH DIELE)	1000P 50V K B TA26	
		C576	0CE2276D618	CAPACITOR,ELECTROLYTIC	220M SMS 10V M FM5 TP(5)	
		C577	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C579	0CN1520F568	CAPACITOR TUBULA(HIGH DIELE)	1500P 16V K X TA26	
		C580	0CE1056K618	CAPACITOR,ELECTROLYTIC	1.0M SMS 50V M FL TP(5)	
		C581	0CE1076D618	CAPACITOR,ELECTROLYTIC	100M SMS 10V M FM5 TP(5)	
		C583	0CE1056K618	CAPACITOR,ELECTROLYTIC	1.0M SMS 50V M FL TP(5)	
		C585	0CE4756K618	CAPACITOR,ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C601	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C604	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C605	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		C606	0CN2230H948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.022UF 25V Z F TA26	
		DSP501	659-250M	DISPLAY	BJ 179GK,DIGITRON,FUTABA	
		D470	0DD400109DA	DIODE	1N4001,RECT,ROHM,TP	
		D472	0DD400109DA	DIODE	1N4001,RECT,ROHM,TP	
		D491	0DD151000FA	DIODE	PBM151,BRID,SILITER,FORMING	
		D492	0DD400109DA	DIODE	1N4001,RECT,ROHM,TP	
		D493	0DD400109DA	DIODE	1N4001,RECT,ROHM,TP	
		D495	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D496	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D498	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		F401	0FT2500B513	FUSE TIME LAG	0.25A 250V 5.2X20 PT/G SMK	
		ZD573	0DZ510009HA	DIODE,ZENER	MTZ5.1-B T-77 5.1V TP,ROHM/K	
		F402	0FT2500B513	FUSE TIME LAG	0.25A 250V 5.2X20 PT/G SMK	
		IC402	0INE457000A	IC, NEC	,UPC4570 DUAL OP AMP NEC	
		IC405	0IGS781500B	IC, GOLDSTAR ELECTRON	GL7815 15V 1A REGULATOR,G/S	
		IC406	0INS791500A	IC, NATIONAL SEMICONDUCTOR	LM7915CT (15V REG 1A),N/S	
		IC501	0ISA756600A	IC,SANYO	LC7566 LED DRIVE,SANYO	
		IC502	0IEX109100A	IC,EXAR	XR-1091 BPF)7BAND),EXAR	
		IC503	0IMI522900A	IC, MITSUBISHI	,M5229P 7 DOT GR EQ MITS	
		IC504	0IMI522900A	IC, MITSUBISHI	,M5229P 7 DOT GR EQ MITS	
		JK402	576-002A	JACK RCA	JACK,BLOCK S-437P-4P(WH/RD)(S)	
		L571	0LA0102K018	INDUCTOR AXIAL LEAD	10M K 2.3X3.4 L5 TP	
		L572	0LA0102K018	INDUCTOR AXIAL LEAD	10M K 2.3X3.4 L5 TP	
		L575	0LA0102K018	INDUCTOR AXIAL LEAD	10M K 2.3X3.4 L5 TP	
		L601	0LA0102K018	INDUCTOR AXIAL LEAD	10M K 2.3X3.4 L5 TP	
		L602	0LA0102K018	INDUCTOR AXIAL LEAD	10M K 2.3X3.4 L5 TP	
		PIN401	561-910C	CONNECTOR	TERMINAL SEMKO PCB-ROCKING	
		PIN402	561-910C	CONNECTOR	TERMINAL SEMKO PCB-ROCKING	
		PN501	561-647H	CONNECTOR	F-WIRE HOLDER MX51052-0800 (S)	
		PN502	561-647J	CONNECTOR	F-WIRE HOLDER MX51052-1000 (S)	
		Q475	0TR111009AD	TRANSISTOR	KRC111M TP,KEC	
		Q476	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q477	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q491	0TR127509AA	TRANSISTOR	KTA1275-R TP,KEC (KTA1013)	
		Q494	0TR111009AD	TRANSISTOR	KRC111M TP,KEC	
		Q495	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q496	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	

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S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		Q571	0TR111009AD	TRANSISTOR	KRC111M TP,KEC	
		Q572	0TR130209AA	TRANSISTOR	KTD1302 MUTING TP,KEC	
		Q573	0TR130209AA	TRANSISTOR	KTD1302 MUTING TP,KEC	
		RY401	557-011D	RELAY	RY5W-K 5-V 5-A GSI	
		R401	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R402	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R403	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R406	0RD6802F608	RESISTOR,FIXED CARBON FILM	68K 1/6W 5 TA26	
		R407	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R451	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R452	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R453	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R456	0RD6802F608	RESISTOR,FIXED CARBON FILM	68K 1/6W 5 TA26	
		R457	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R466	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R469	0RD5600F608	RESISTOR,FIXED CARBON FILM	560 1/6W 5 TA26	
		R472	0RD0102F608	RESISTOR,FIXED CARBON FILM	10 1/6W 5 TA26	
		R473	0RD6800F608	RESISTOR,FIXED CARBON FILM	680 1/6W 5 TA26	
		R474	0RD6800F608	RESISTOR,FIXED CARBON FILM	680 1/6W 5 TA26	
		R476	0RD4701F608	RESISTOR,FIXED CARBON FILM	4.7K 1/6W 5 TA26	
		R477	0RD1204F608	RESISTOR,FIXED CARBON FILM	1.2M 1/6W 5 TA26	
		R478	0RD4701F608	RESISTOR,FIXED CARBON FILM	4.7K 1/6W 5 TA26	
		R479	0RD0472F608	RESISTOR,FIXED CARBON FILM	47 1/6W 5 TA26	
		R481	0RD4700F608	RESISTOR,FIXED CARBON FILM	470 1/6W 5 TA26	
		R482	0RD1502F608	RESISTOR,FIXED CARBON FILM	15K 1/6W 5 TA26	
		R483	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R484	0RD4702F608	RESISTOR,FIXED CARBON FILM	47K 1/6W 5 TA26	
		R490	0RD0471F608	RESISTOR,FIXED CARBON FILM	4.7 1/6W 5 TA26	
		R491	0RD0471F608	RESISTOR,FIXED CARBON FILM	4.7 1/6W 5 TA26	
		R492	0RD0471F608	RESISTOR,FIXED CARBON FILM	4.7 1/6W 5 TA26	
		R493	0RD0471F608	RESISTOR,FIXED CARBON FILM	4.7 1/6W 5 TA26	
		R494	0RD0472F608	RESISTOR,FIXED CARBON FILM	47 1/6W 5 TA26	
		R495	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R497	0RD2201F608	RESISTOR,FIXED CARBON FILM	2.2K 1/6W 5 TA26	
		R498	0RD3301F608	RESISTOR,FIXED CARBON FILM	3.3K 1/6W 5 TA26	
		R499	0RD3301F608	RESISTOR,FIXED CARBON FILM	3.3K 1/6W 5 TA26	
		R503	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R520	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R531	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R553	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R570	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R571	0RD8201F608	RESISTOR,FIXED CARBON FILM	8.2K 1/6W 5 TA26	
		R572	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R573	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R574	0RD5600F608	RESISTOR,FIXED CARBON FILM	560 1/6W 5 TA26	
		R575	0RD5600F608	RESISTOR,FIXED CARBON FILM	560 1/6W 5 TA26	
		R577	0RD1501F608	RESISTOR,FIXED CARBON FILM	1.5K 1/6W 5 TA26	
		R578	0RD2203F608	RESISTOR,FIXED CARBON FILM	220K 1/6W 5 TA26	
		R579	0RD1502F608	RESISTOR,FIXED CARBON FILM	15K 1/6W 5 TA26	
		R580	0RD2203F608	RESISTOR,FIXED CARBON FILM	220K 1/6W 5 TA26	

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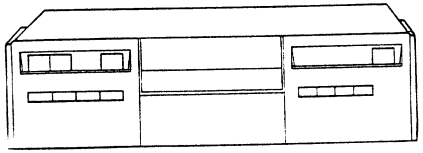
		R581	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R582	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R583	0RD1004F608	RESISTOR,FIXED CARBON FILM	1.0M 1/6W 5 TA26	
		R584	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R602	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R603	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R604	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R605	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R606	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R607	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R608	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R609	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R610	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R611	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R612	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R613	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R614	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R615	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R616	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R617	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R618	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R619	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R620	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R621	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R622	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R625	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R626	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R633	0RD1000F608	RESISTOR,FIXED CARBON FILM	100 1/6W 5 TA26	
		SW501	554-635A	SWITCH PUSH	SPPH121AP013	
		SW502	554-635A	SWITCH PUSH	SPPH121AP013	
		SW503	554-635A	SWITCH PUSH	SPPH121AP013	
		T401	641-842Z	TRANS POWER	115/230V 50/60HZ,EQ YS/NY	
		VR501	612-628C	RESISTOR SLIDE	EWA-SJNT50G15,W100X1 (626C)(S)	
		VR502	612-628C	RESISTOR SLIDE	EWA-SJNT50G15,W100X1 (626C)(S)	
		VR503	612-628C	RESISTOR SLIDE	EWA-SJNT50G15,W100X1 (626C)(S)	
		VR504	612-628C	RESISTOR SLIDE	EWA-SJNT50G15,W100X1 (626C)(S)	
		VR505	612-628C	RESISTOR SLIDE	EWA-SJNT50G15,W100X1 (626C)(S)	
		VR506	612-628C	RESISTOR SLIDE	EWA-SJNT50G15,W100X1 (626C)(S)	
		VR507	612-628C	RESISTOR SLIDE	EWA-SJNT50G15,W100X1 (626C)(S)	
		VR551	612-628C	RESISTOR SLIDE	EWA-SJNT50G15,W100X1 (626C)(S)	
		VR552	612-628C	RESISTOR SLIDE	EWA-SJNT50G15,W100X1 (626C)(S)	
		VR553	612-628C	RESISTOR SLIDE	EWA-SJNT50G15,W100X1 (626C)(S)	
		VR554	612-628C	RESISTOR SLIDE	EWA-SJNT50G15,W100X1 (626C)(S)	
		VR555	612-628C	RESISTOR SLIDE	EWA-SJNT50G15,W100X1 (626C)(S)	
		VR556	612-628C	RESISTOR SLIDE	EWA-SJNT50G15,W100X1 (626C)(S)	
		VR557	612-628C	RESISTOR SLIDE	EWA-SJNT50G15,W100X1 (626C)(S)	
		ZD491	0DZ620009EA	DIODE,ZENER	MTZ6.2-B T-77 6.2V TP,ROHM/K	
		ZD492	0DZ240009CE	DIODE,ZENER	MTZ24D-T-77 ROHM-K	
		ZD572	0DZ620009EA	DIODE,ZENER	MTZ6.2-B T-77 6.2V TP,ROHM/K	
		ZD497	0DZ620009EA	DIODE,ZENER	MTZ6.2-B T-77 6.2V TP,ROHM/K	

[REPLACEMENT PARTS LIST] PAGE : 6

RUN-DATE : 93.05.26

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		ZD571	0DZ620009EA	DIODE,ZENER	MTZ6.2-B T-77 6.2V TP,ROHM/K	
				*** END OF DATA ***		

COMPACT DISC PLAYER



MODEL: CD4335

SPECIFICATIONS

1) Frequency Response (20 Hz~20 kHz)	±0.5dB
2) Signal-to-noise Ratio	98dB
3) Dynamic Range	95dB
4) T.H.D.	0.02%
5) Channel Separation	90dB
6) Channel Difference	0dB
7) Output Voltage	2.0dB
8) Power Requirement	AC 230V, 50 Hz
9) Dimension (W x H x D)	376 x 130 x 312 (mm)
10) Weight	3.7kg

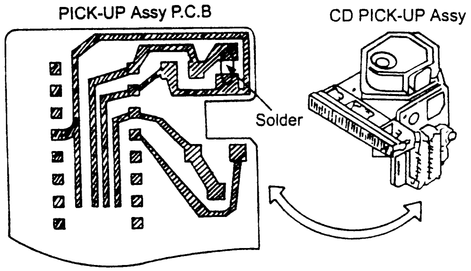
NOTE: Specifications are subject to change without notice for improvement.

SERVICE INSTRUCTIONS

PRECAUTION TO REPLACE OPTICAL BLOCK

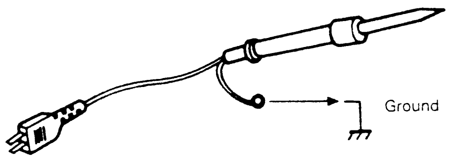
Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove solder shown in right figure.


PICK-UP Assy P.C.B
CD PICK-UP Assy
Solder

To prevent electrostatic breakdown, laser diode and ground are connected with solder.

NOTE: When removing solder, be sure to use a grounded solder-iron, to prevent electrostatic breakdown.



CAUTION FOR HANDLING THE OPTICAL PICK-UP

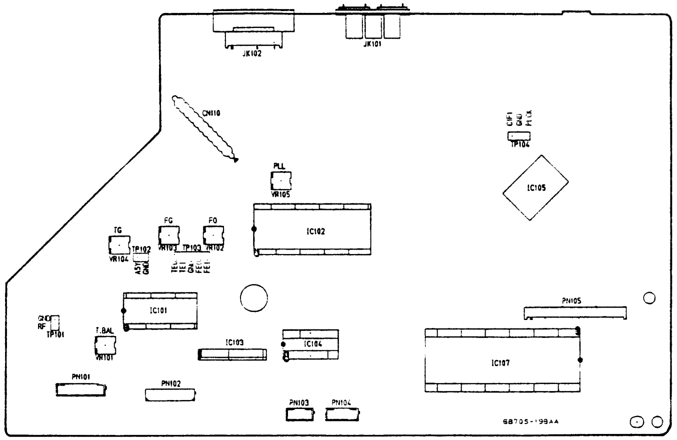
The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body. So, when handling a pick-up, the procedure for grounding as follows is required to prevent damage caused by static electricity.

1. Grounding For Human Body.
   Be sure to put on a wrist-strap for grounding (with impedance lower than $10^8\Omega$) whose other end is grounded. The strap works to drain away the static electricity build-up on the human body.
2. Grounding For the Work Table.
   Be sure to lay on the table a conductive sheet (with impedance lower than $10^9\Omega$) such as a sheet of copper, which is grounded.
3. As static electricity build-up on clothes is not drained away, be careful not to let your clothes touch the pick-up.

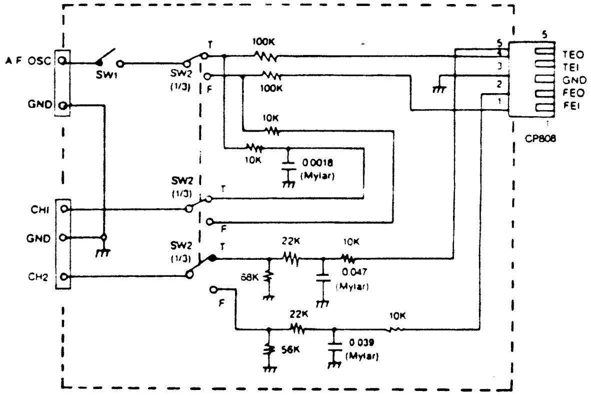
ADJUSTMENTS

This set has been aligned at the factory and normally will not require further adjustment. As a result, it is not recommened that any attempt is made to modificate any circuit. If any parts are replaced or if anyone tampers with the adjustment, realignment may be necessary.

TEST & ADJUSTMENT POINT


JK102
JK101
CN110
CIF1
GND
FLCK
TP104
IC105
PLL
VR105
IC102
TG
VR104
TP102
ASY
GND
FG
VR103
TP103
TEO
TEI
GND
FEO
FEI
FO
VR102
IC101
GND
RF
TP101
T.BAL
VR101
IC103
IC104
PN105
IC107
PN101
PN102
PN103
PN104
6870S-198AA

TRACKING & FOCUS GAIN JIG


A F OSC
GND
SW1
SW2 (1/3)
T
F
100K
100K
10K
10K
0.0018 (Mylar)
CH1
GND
CH2
22K
10K
68K
0.047 (Mylar)
22K
10K
56K
0.039 (Mylar)
5
4
3
2
1
TEO
TEI
GND
FEO
FEI
CP808

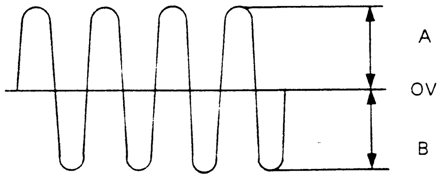
1. Before adjusting, preset adjustment potentiometers VR101, 102, 103, 104 and 105 center.

2. PLL ADJUSTMENT

1) STOP mode.
2) Connect digital frequency counter to TP104 (PLCK) and TP104 (GND).
3) Shortcircuit TP102 (ASY) and TP102 (GND).
4) Adjust VR105 so that the frequency counter reading becomes 4.50MHz (±10kHz).
5) Opencircuit TP102 (ASY) and TP102 (GND).

3. TRACKING BALANCE ADJUSTMENT

1) Connect the oscilloscope to TP103 (Pin ⑤-TEO) and TP103 (Pin ③-GND).
2) Place test disc (YEDS-18) on turntable and play the music number 12.
3) Minimize volume VR104.
4) Adjust VR101 so that the amplitude above and below the zero DC line becomes equal (amplitude A=B)



A = B

5) Preset adjustment potentiometer VR104 center again.

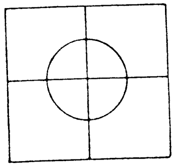
4. FOCUS OFFSET ADJUSTMENT (You have to use 10:1 prove)

1) Connect oscilloscope to TP101 (RF) and TP101 (GND).
2) Put unit into play mode.
3) Adjust VR102 so that eye pattern become clear and waveform (Vp-p) is maximum.
4) Stop mode.
5) Connect oscilloscope to TP103 (Pin ②-FEO) and TP103 (Pin ③-GND).
6) Confirm the oscilloscope reading
   i) Less than 200mV —— OK
   ii) More than 200mV —— readjust VR102 200mV.

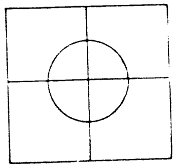
5. FOCUS, TRACKING GAIN ADJUSTMENT (with Jig)

1) Connect a gain jig to TP103.
2) After setting a frequency of audio frequency OSC to 600Hz and voltage to 4Vrms, connect to gain jig.
3) Set the jig with oscilloscope to below.
   Ⅰ) TIME/DIV.: X-Y Mode
   Ⅱ) CH1: 50mV/DIV.: AC Mode
   Ⅲ) CH2: 2V/DIV.: AC Mode
4) After the test disc (YEDS-18) and put unit into play mode on track, adjust like below.

(A) FOCUS GAIN ADJUSTMENT
Place SW2 to F, adjust VR103



(B) TRACKING GAIN ADJUSTMENT
Place SW2 to T, adjust VR104



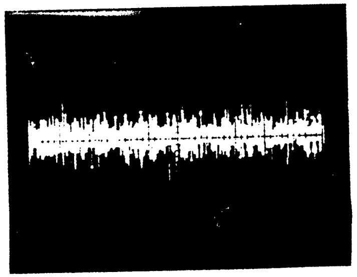
6. FOCUS GAIN ADJUSTMENT (without Jig)

1) Connect a oscilloscope to IC103 Pin ③.
2) Insert test disc and put unit into play mode on track.
3) Adjust VR103 so that the waveform on the oscilloscope becomes like below.

2mS/div.
0.5V/div.
DC Mode
OV

7. TRACKING GAIN ADJUSTMENT (without Jig)

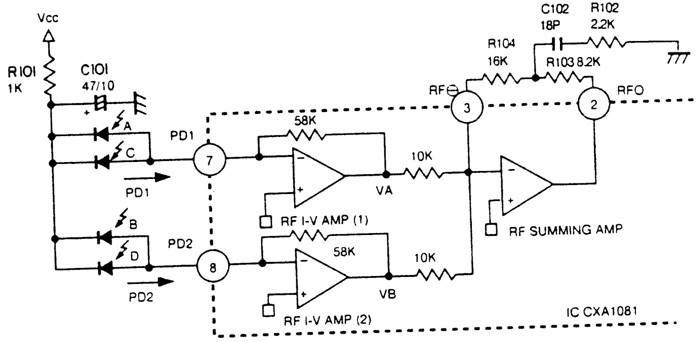
1) Connect a oscilloscope to IC103 Pin ④.
2) Insert test disc and put unit into play mode on track.
3) Adjust VR104 so that the waveform on the oscilloscope becomes like below.



DESCRIPTION OF FUNCTIONS

1. RF AMPLIFIER

RF 1-V amplifiers (1) and (2) are converted to voltage from the signal current of pin photodiodes connected to PD1 and PD2 through the 58KΩ equivalent resistance. Furthermore, it is added in the RF summing amplifier and (A+B+C+D) is output at RFO. At this pin (RFO) , the eye pattern can be checked.

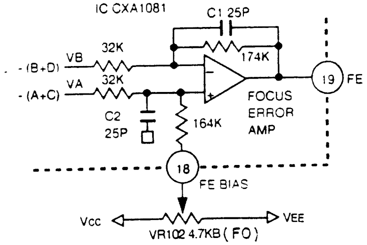


Vcc
R101 1K
C101 47/10
C102 18P
R102 2.2K
R104 16K
R103 8.2K
RFI
RFO
3
2
A
C
PD1
7
58K
10K
VA
RF I-V AMP (1)
RF SUMMING AMP
B
D
PD2
8
58K
10K
VB
RF I-V AMP (2)
IC CXA1081

The RF amplifier output voltage (low-frequency) is V_{RFO}=2.2x(V_A+V_B)=127.6KΩx(iPD1+iPD2). (at RFO)

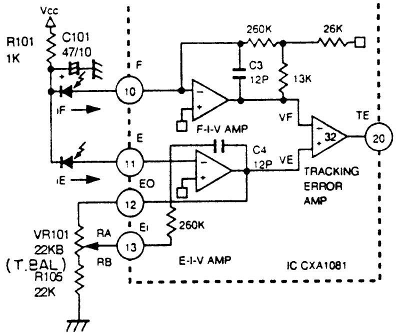
2. FOCUS ERROR AMPLIFIER

The Focus Error Amplifier is the difference between RF 1-V amplifier (1) output (A+C) and RF 1-V amplifier (2) output (B+D). The output becomes (A+C−B−D).



IC CXA1081
C1 25P
(B+D)
VB
32K
VA
32K
(A+C)
174K
19
FE
FOCUS ERROR AMP
C2 25P
164K
18
FE BIAS
Vcc
VEE
VR102 4.7KB (FO)

3. TRACKING ERROR AMPLIFIER



Vcc
R101 1K
C101 47/10
F
10
iF
250K
26K
C3 12P
13K
F-I-V AMP
VF
TE
32
20
E
11
iE
EO
C4 12P
VE
TRACKING ERROR AMP
12
Ei
260K
VR101 22KB (T.BAL)
RA
RB
13
R105 22K
E-I-V AMP
IC CXA1081

E I-V amplifier and F I-V amplifier are converted to voltage from the signal current of pin photodiode connected: E and F. The E and F I-V amplifiers output voltage is,

V_F = iF x 403KΩ, and

V_E = iE x 260KΩ x R_A/(R_B+22K)+(R_A+260K).

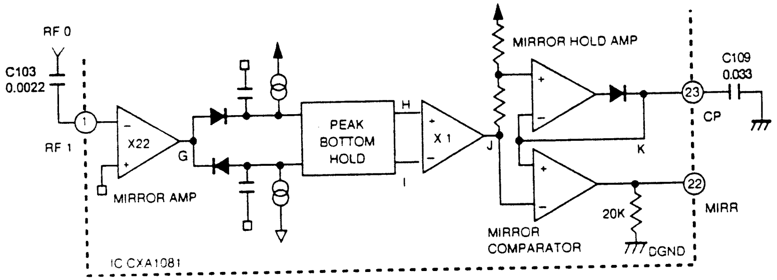
The tracking error amplifier is the difference between the E I-V amplifier output and the F I-V amplifier output, this output is (E-F).

V_{TE} = (V_E-V_F) x 3.2

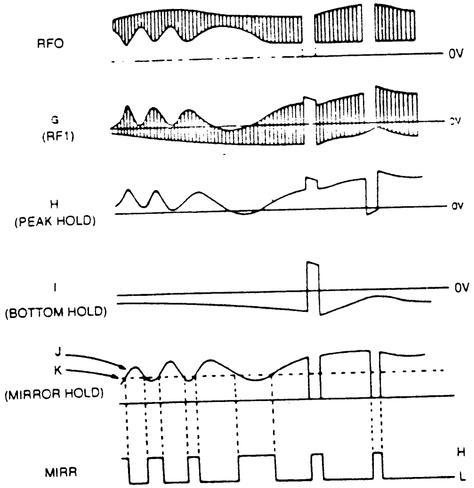
= (iE-iF) x 1290KΩ

4. MIRROR CIRCUIT

This circuit, after amplifying the RFI signal, holds its bottom and peak. The peak hold is done with a time constant able to track down a 30kHz traverse and the bottom hold. This is done with a time constant able to track down envelope fluctuations in the revolving cycle.

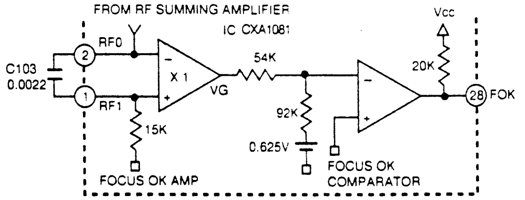


RF O
C103 0.0022
RF I
1
X22
G
MIRROR AMP
PEAK BOTTOM HOLD
H
I
X 1
J
MIRROR HOLD AMP
K
C109 0.033
23
CP
22
MIRR
20K
MIRROR COMPARATOR
DGND
IC CXA1081



With the differential amplification of these peak and bottom hold signals, H and I, the envelope signal J (demodulated to DC) is obtained. Two-thirds of the peak value of this signal J is held with a large time constant for the signal K. When K is compared with J, a mirror output is obtained. That is, the mirror output gives "L" on the disc track,"H" between tracks (mirror section) and also "H" in the defect detection. The time constant for the mirror hold must be sufficiently larger than that of the traverse signal.

5. FOCUS OK CIRCUIT


FROM RF SUMMING AMPLIFIER
IC CXA1081
Vcc
RFO
2
C103
0.0022
1
RF1
X 1
VG
54K
20K
28
FOK
92K
15K
0.625V
FOCUS OK AMP
FOCUS OK
COMPARATOR

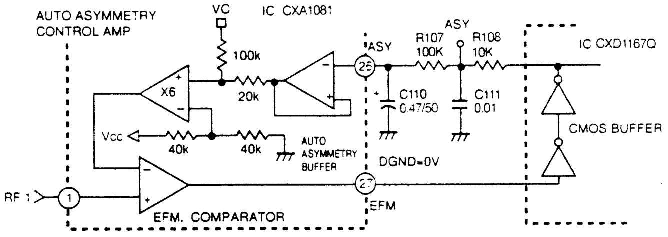
The focus OK circuit generates a timing window to lock on the focus servo from a focus search status. Pin ① will get the HPF (High Pass filter) output from an RF signal from Pin ②-the LPF (Low Pass Filter) output (opposit phase) for the focus OK amplifier output.

The focus OK amplifier output is inverted when $V_{RFI}-V_{RFO}$≒-0.37V.

C803 is for determining the time constants of HPF in the EFM comparator and mirror circuits as well as LPF in the focus OK amplifier. When 0.0022μF is selected for C103, fc (cut-off frequency) = 1kHz, prevents the block error rate from degenerating as a damaged RF envelope results from the scratched disc, etc.

6. EFM COMPARATOR

The EFM comparator changes RF signal into a binary value. As the asymmetry generated due to variations in disc manufacturing cannot be eliminated by the AC coupling alone, the reference voltage of EFM comparator is controlled utilizing the fact that the generation probability of 1, 0 is 50% each in the binary EFM signals.

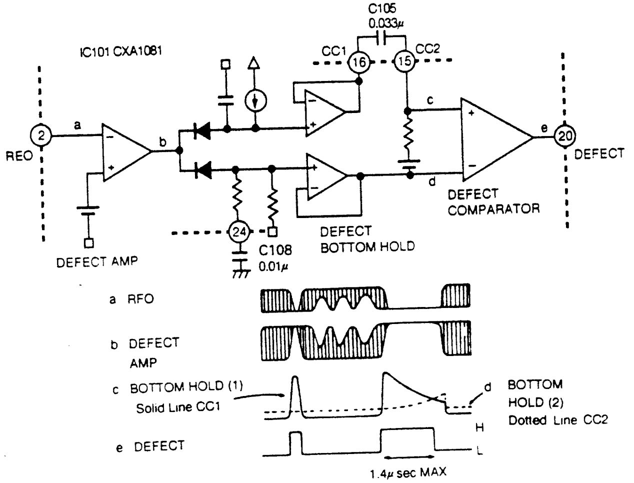

AUTO ASYMMETRY
CONTROL AMP
VC
IC CXA1081
100k
20k
X6
Vcc
40k
40k
AUTO
ASYMMETRY
BUFFER
ASY
26
R107
100K
ASY
R108
10K
C110
0.47/50
C111
0.01
IC CXD1167Q
CMOS BUFFER
DGND=0V
27
EFM
RF 1
1
EFM. COMPARATOR

As this comparator is a current SW type, each of the H and L levels does not equal the power supply voltage, requiring feedback through a CMOS buffer.

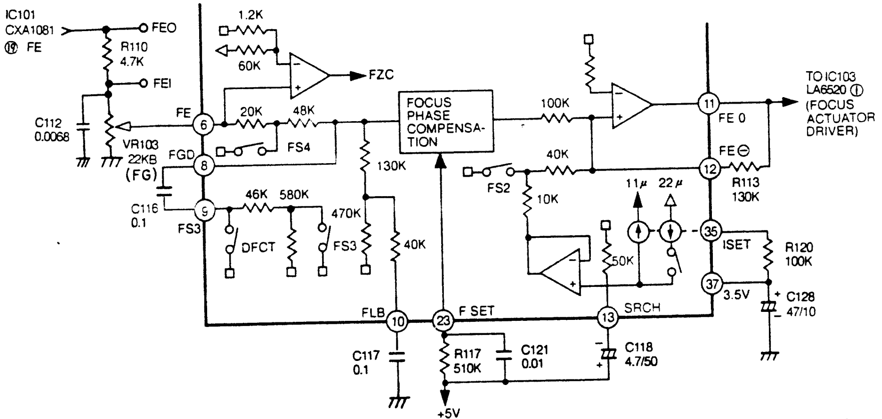
R107, R108, C110 and C111 form a LPF to obtain (Vcc+DGND)/2V. When fc (out-off frequency) is made more than 500Hz, the EFM low-frequency component leaks dably, degenerating the blcok error rate.

7. DEFECT CIRCUIT

The RFI signal bottom, after being inverted, is held with two time constants, one long and one short. The short time-constant bottom hold is done for a disc mirror defect more than 0.1m sec. The long time-constant bottom hold is done with the mirror level prior to the defect. By differentiating this with a capacitor coupling and shifting the level, both signals are compared to generate the mirror defect detection signal.


C105
0.033μ
IC101 CXA1081
CC1
16
15
CC2
a
b
c
e
2
REO
20
DEFECT
d
DEFECT
COMPARATOR
24
C108
0.01μ
DEFECT
BOTTOM HOLD
DEFECT AMP
a RFO
b DEFECT
AMP
c BOTTOM HOLD (1)
Solid Line CC1
d BOTTOM
HOLD (2)
Dotted Line CC2
H
L
e DEFECT
1.4μ sec MAX

8. FOCUS SERVO SYSTEM


IC101
CXA1081
⑲ FE
FEO
R110
4.7K
FEI
C112
0.0068
VR103
22KB
(FG)
FE
6
FGD
8
C116
0.1
9
FS3
1.2K
60K
FZC
20K
48K
FS4
46K
580K
DFCT
FS3
470K
130K
40K
FOCUS
PHASE
COMPENSA-
TION
100K
40K
FS2
10K
11μ
22μ
50K
11
FE 0
12
FE⊖
R113
130K
TO IC103
LA6520 ①
(FOCUS
ACTUATOR
DRIVER)
35
ISET
R120
100K
37
3.5V
C128
47/10
FLB
10
23
F SET
13
SRCH
C117
0.1
R117
510K
C121
0.01
C118
4.7/50
+5V

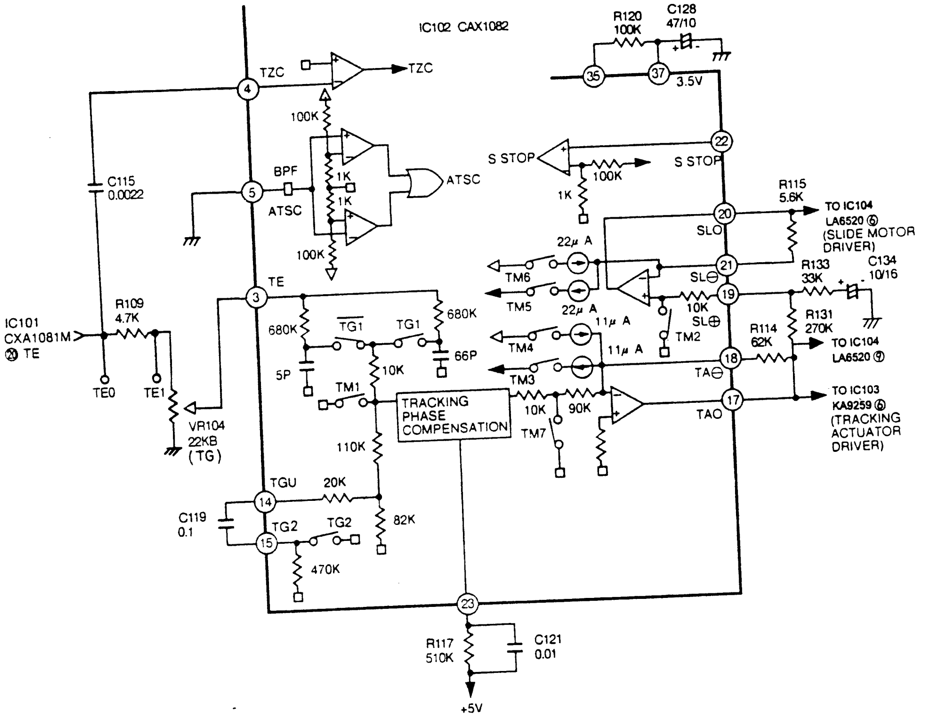
The above is a block diagram of the focus servo system. When FS3 is switched on, the high frequency gain can be reduced by forming a low frequency time constant through a capacitor connected across pins 2 and 3 and the internal resistor.

The capacitor across the pin 10 and GND has a time constant to raise the low frequency usually playback condition. The peak frequency of the focus phase compensation is inversely proportional to the resistor connected to pin 23 (about 1.2kHz when the resistor is 510KΩ).

The focus search peak becomes about ±1.1 Vp-p with the above constant. The peak is inversely proportional to the resistor connected across the pins 35 and 37. However, when this resistor is varied, the peaks of track jump and sled kick also vary.

[illegible] comparator invert inout is set to 2% of the difference between the reference [illegible] [illegible] x (Vcc-VC).

9. TRACKING SERVO SYSTEM


IC102 CAX1082
R120 100K
C128 47/10
35
37
3.5V
TZC
4
TZC
100K
BPF
5
ATSC
1K
1K
100K
ATSC
C115 0.0022
S STOP
100K
1K
S STOP
22
R115 5.6K
20
TO IC104 LA6520 ⑥ (SLIDE MOTOR DRIVER)
SLO
22μ A
TM6
21
SL⊖
R133 33K
C134 10/16
TM5
22μ A
10K
19
SL⊕
R131 270K
TM2
11μ A
TM4
11μ A
R114 62K
18
TO IC104 LA6520 ⑨
TA⊖
TM3
TE
3
680K
TG1
TG1
680K
66P
5P
10K
TM1
TRACKING PHASE COMPENSATION
10K
90K
TM7
17
TAO
TO IC103 KA9259 ⑥ (TRACKING ACTUATOR DRIVER)
IC101 CXA1081M ⑳ TE
R109 4.7K
TE0
TE1
VR104 22KB (TG)
110K
TGU
20K
14
C119 0.1
TG2
TG2
15
82K
470K
23
R117 510K
C121 0.01
+5V

The above is a block diagram of the tracking sled servo system.
The capacitor across pins 14 and 15 has a time constant to lower the high frequency when TG2 is switched off. The tracking phase compensation peak frequency is inversely proportional to the resistor connected to pin 23 (about 1.2kHz when the resistor is 510KΩ).
For a tracking jump in the FWD or REV direction, TM3 or TM4 are aet to ON. At this time, the peak voltage fed to the tracking coil is determined by the TM3 and TM4 current values and the feedback resistor from pin 18. That is:

Track jump peak voltage = TM3(TM4) current value x feedback resistor value

The FWD or REV sled kick is done by setting TM5 or TM6 to ON. At this time, the peak voltage added to the sled motor is determined by the TM5 or TM6 current value and the feedback resistor from pin 21.

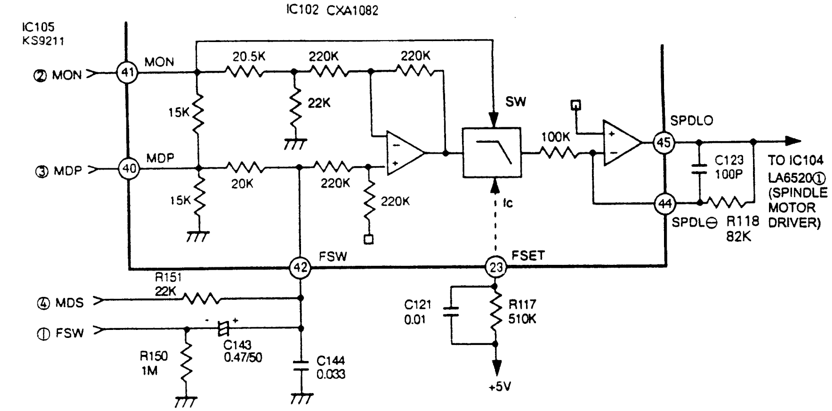
Sled jump peak voltage = TM5 (TM6) current value x feedback resistor value

Each SW current value is determined by the resistor connected to pins 35 and 37.
When the resistor is at about 120KΩ.

TM3 or TM4 is ±11μA and TM5 or TM6 is ±22μA.

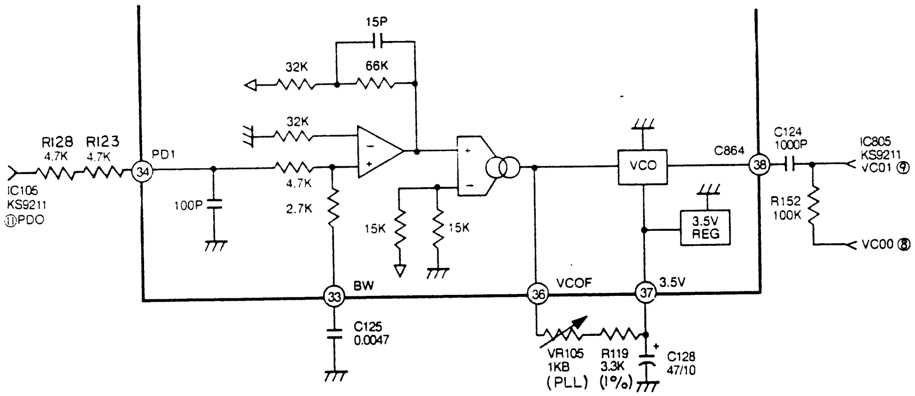
This current value is almost inversely proprotional to the resistor, variable within a range of about 5 to 40 μ A for TM3.
S STOP is the ON/OFF detection signal for the limit SW of the sled motor's innermost circumference.

10. SPINDLE SERVO AND LPF


IC102 CXA1082
IC105 KS9211
② MON
41
MON
20.5K
220K
220K
15K
22K
SW
③ MDP
40
MDP
20K
220K
15K
220K
Ic
100K
SPDLO
45
C123 100P
TO IC104 LA6520① (SPINDLE MOTOR DRIVER)
44
SPDL⊖ R118 82K
42
FSW
23
FSET
R151 22K
④ MDS
① FSW
R150 1M
C143 0.47/50
C144 0.033
C121 0.01
R117 510K
+5V

The 200Hz LPF is formed with 0.033F and 20KΩ connected to pin 42 and the secondary LPF is formed with the built-in LPF (fc up to 200Hz with 510KΩ for pin 23), and the carrier component of the CLV servo error signals MDS and MDP is eliminated.
In the CLV-S mode, FSW becomes L and the pin 42 LPF fc lowers, strengthening the filter further. With the pin 23 resistor connected to Vcc, fc does not vary with power supply voltage fluctuations.

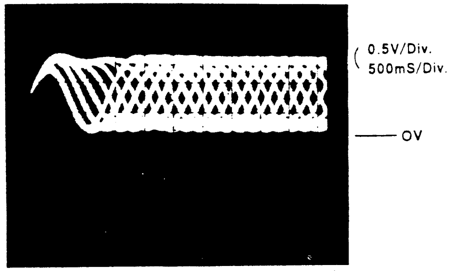
11. VCC LOOP FILTER & 8.64MHz VCO


IC102 CXA1082
15P
32K
66K
32K
R128 4.7K
R123 4.7K
PD1
34
IC105 KS9211 ⑪PDO
100P
4.7K
2.7K
15K
15K
VCO
3.5V REG
C864
38
C124 1000P
IC805 KS9211 VC01 ⑨
R152 100K
VC00 ⑧
33
BW
36
VCOF
37
3.5V
C125 0.0047
VR105 1KB (PLL)
R119 3.3K (1%)
C128 47/10

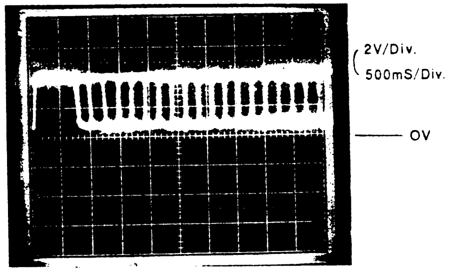
The phase compensation output PDD input from pin 34 has its PWM carrier component removed in the loop filter. Then, the V-I conversion is made and the free-running frequency setting current from pin 36 is added to control the VCO frequency. The VCO self-running frequency is almost inversely proportional to the resistor across pins 36 and 37. This resistor is set so that the PLL capture range center matches the 4. 3218MHz at pin 70 of the KS9211.

WAVEFORMS OF MAJOR CHECK POINT

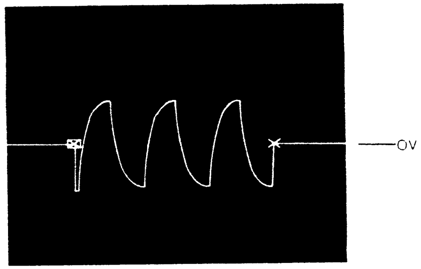
1. HF signal (RF signal) waveform
   (test point TP101) during normal play



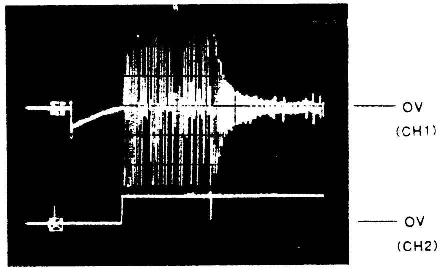
2. EFM signal (pin NO. ㉗ of IC101
   waveform during normal play



3. Focus coil drive waveform (pin NO. ① of IC103)
   - When focus search failed or there is no disc on the tray

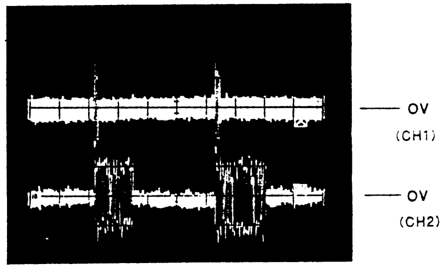


- Focus coil drive waveform (pin NO. ③ of IC103) and FOK (pin NO. ㉘ of IC101) when focus search is accomplished



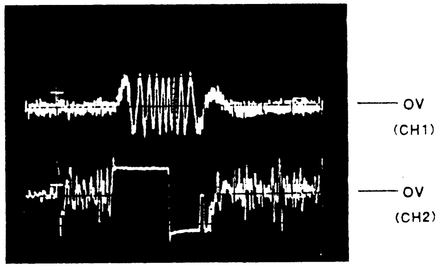
CH1: FOCUS COIL DRIVE SIGNAL
2V/Div.
CH2: FOK

4. Tracking coil drive waveform (pin NO. ⑨ of IC103) and TEO during track traverse
   (1) When time division is 20mS/div.



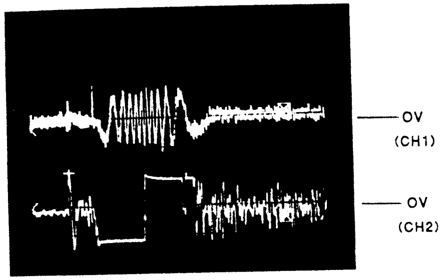
CH1 : TEO
1V/Div.
CH2 : TRACKING COIL DRIVE SIGNAL
2V/Div.

(2) When time division is 0.5mS/div.
(During forward track traverse)



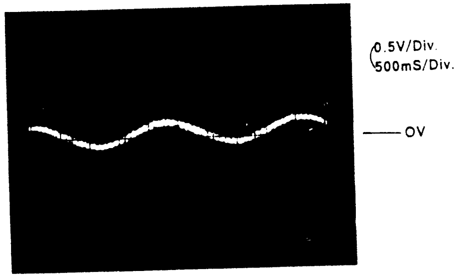
CH1 : TEO
1V/Div.
CH2 : TRACKING COIL DRIVE SIGNAL
2V/Div.

(3) When time division is 0.5mS/div.
(During backward track traverse)

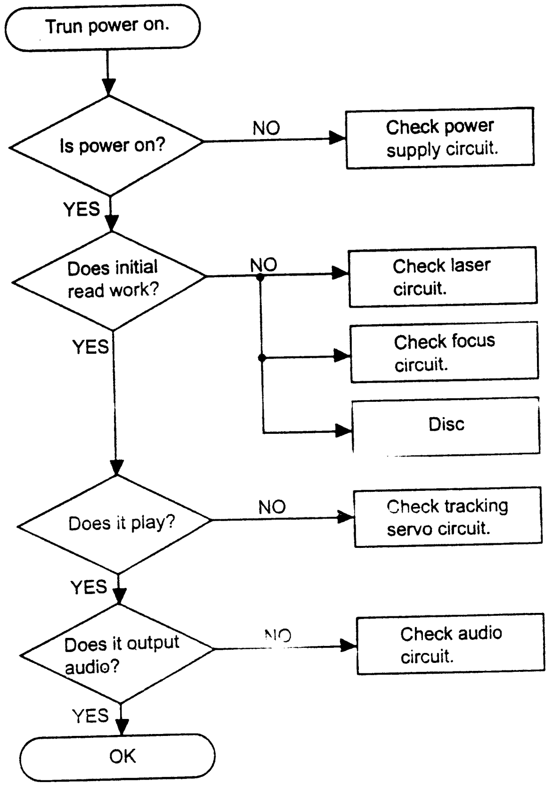


CH1 : TEO
1V/Div.
CH2 : TRACKING COIL DRIVE SIGNAL
2V/Div.

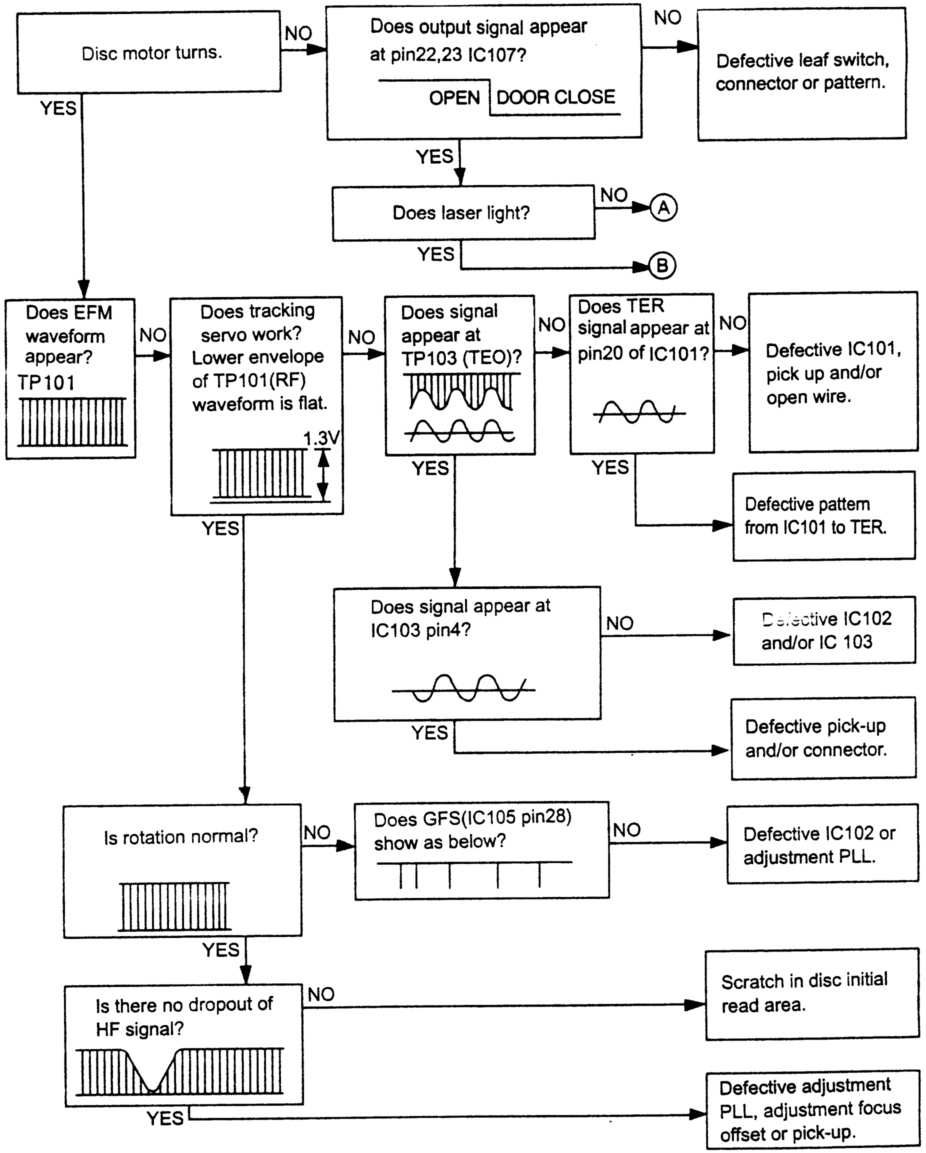
5. Feed motor drive waveform (pin NO. ④ of IC104) During normal play

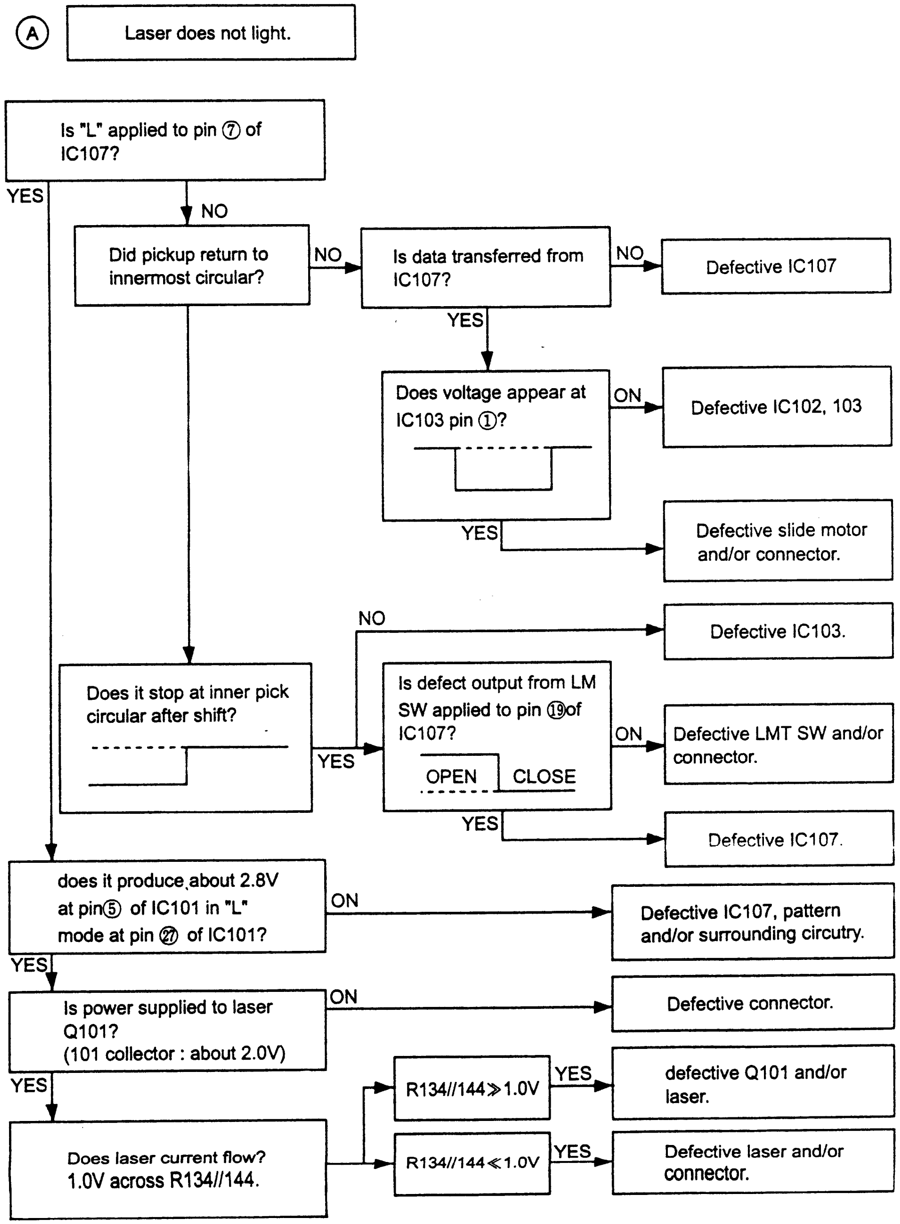


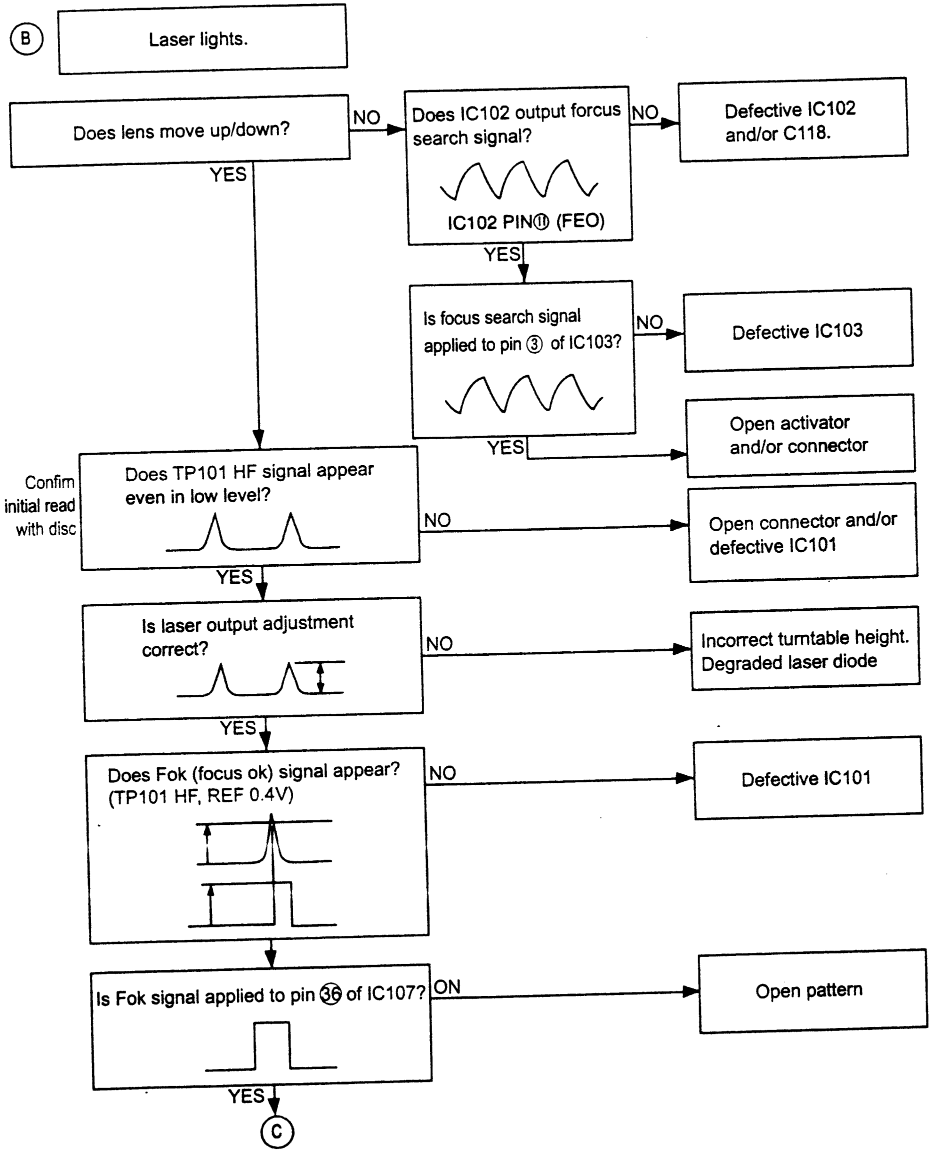
TROUBLESHOOTING

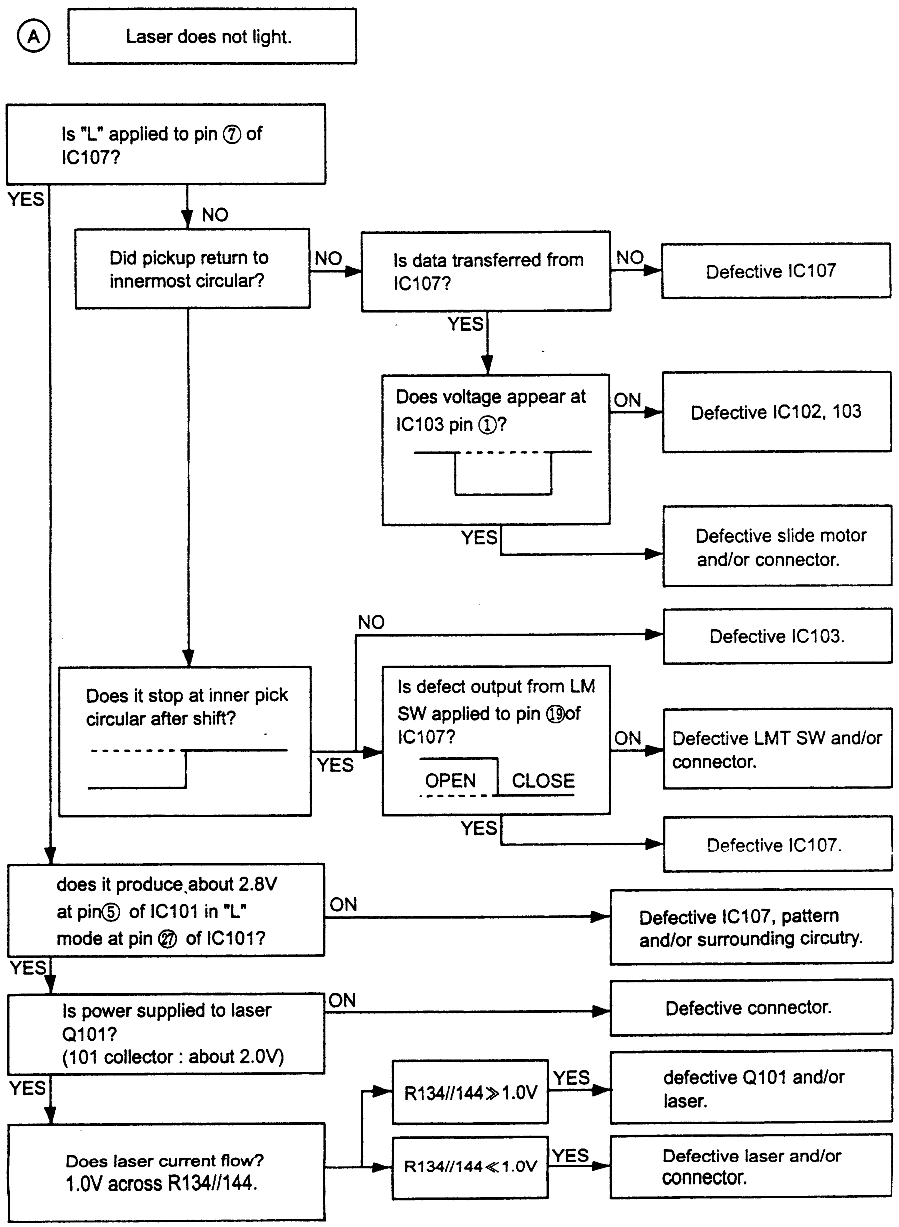

Trun power on.
Is power on?
NO
Check power supply circuit.
YES
Does initial read work?
NO
Check laser circuit.
Check focus circuit.
Disc
YES
Does it play?
NO
Check tracking servo circuit.
YES
Does it output audio?
NO
Check audio circuit.
YES
OK

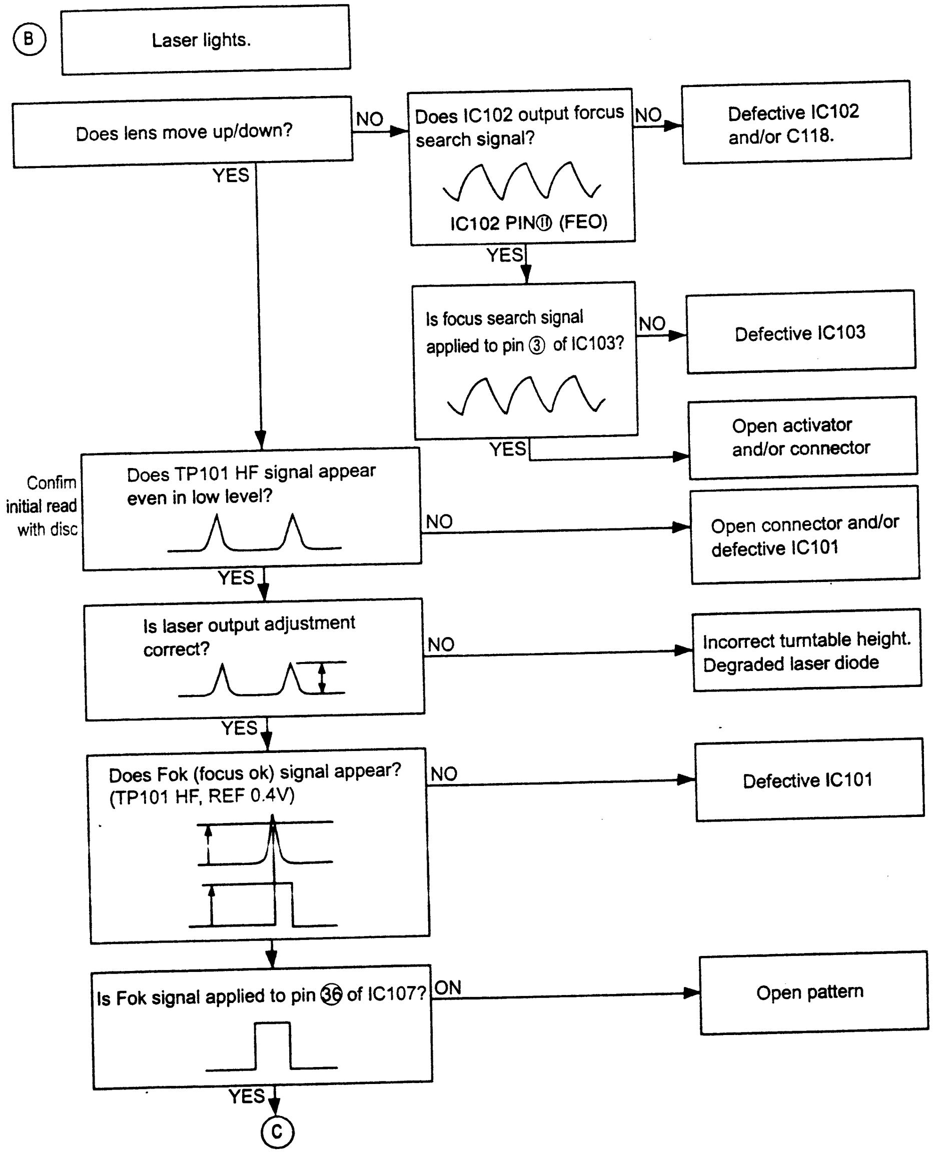
Fails to initial read

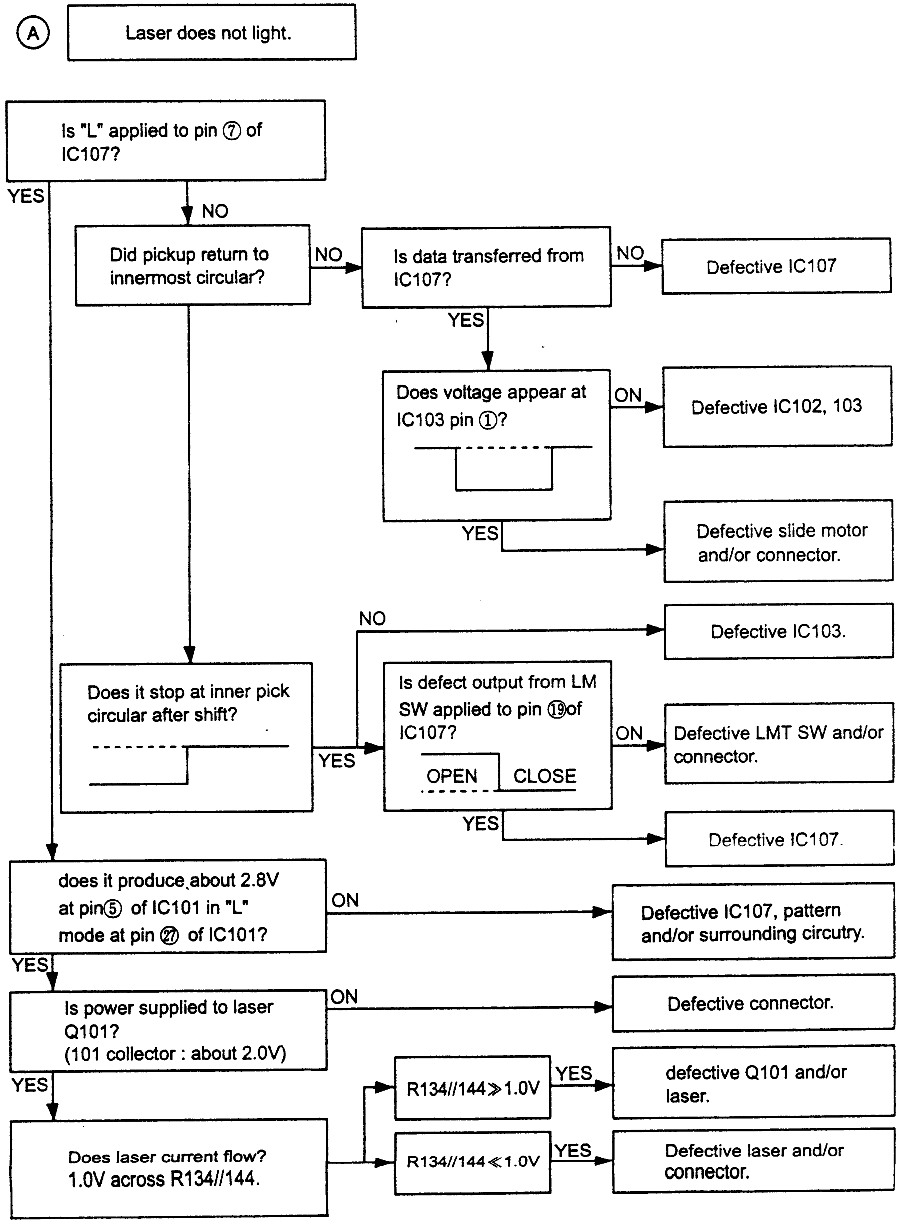

Disc motor turns.
NO
Does output signal appear at pin22,23 IC107?
OPEN
DOOR CLOSE
NO
Defective leaf switch, connector or pattern.
YES
YES
Does laser light?
NO
A
YES
B
Does EFM waveform appear? TP101
NO
Does tracking servo work? Lower envelope of TP101(RF) waveform is flat.
1.3V
NO
Does signal appear at TP103 (TEO)?
NO
Does TER signal appear at pin20 of IC101?
NO
Defective IC101, pick up and/or open wire.
YES
Defective pattern from IC101 to TER.
YES
Does signal appear at IC103 pin4?
NO
Defective IC102 and/or IC 103
YES
Defective pick-up and/or connector.
YES
Is rotation normal?
NO
Does GFS(IC105 pin28) show as below?
NO
Defective IC102 or adjustment PLL.
YES
Is there no dropout of HF signal?
NO
Scratch in disc initial read area.
YES
Defective adjustment PLL, adjustment focus offset or pick-up.

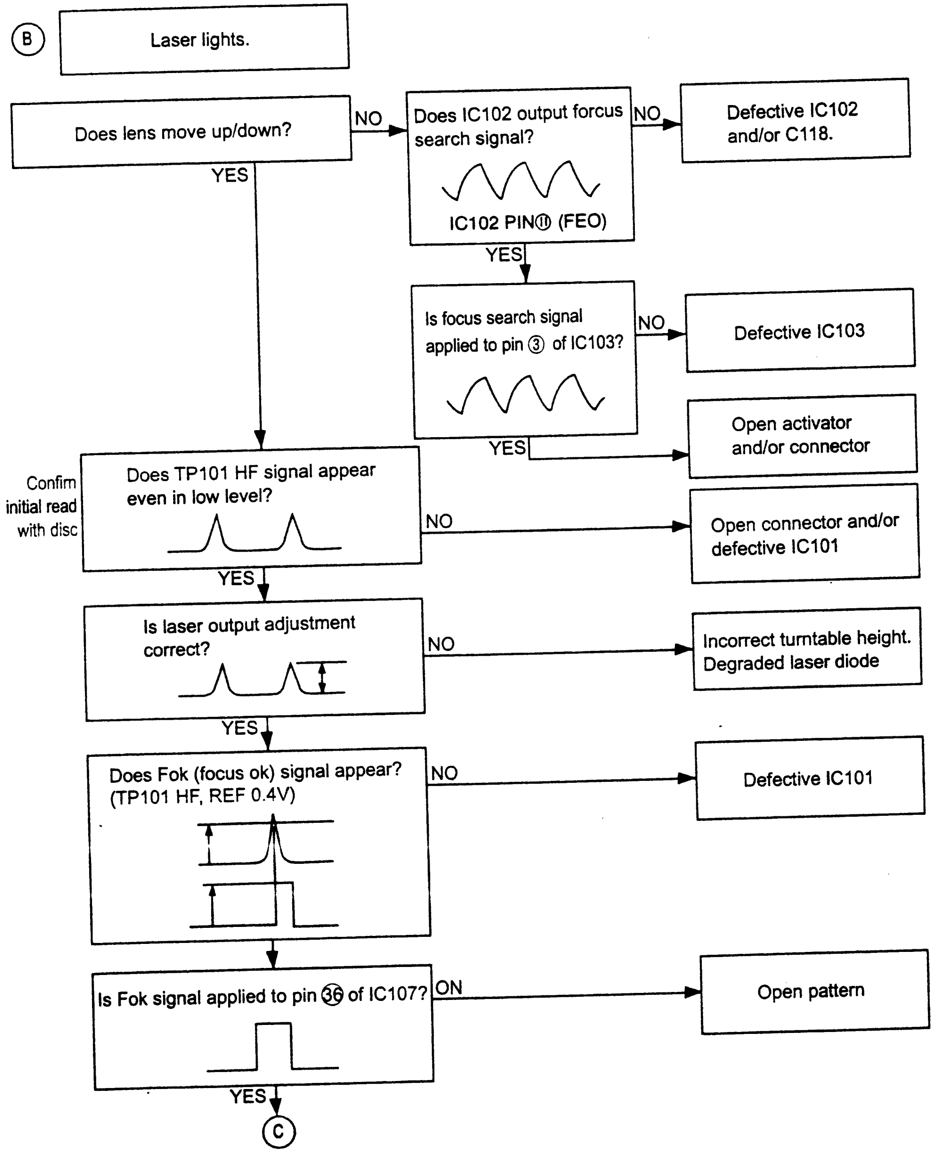

Ⓐ
Laser does not light.
Is "L" applied to pin ⑦ of IC107?
YES
NO
Did pickup return to innermost circular?
NO
Is data transferred from IC107?
NO
Defective IC107
YES
Does voltage appear at IC103 pin ①?
ON
Defective IC102, 103
YES
Defective slide motor and/or connector.
NO
Defective IC103.
Does it stop at inner pick circular after shift?
YES
Is defect output from LM SW applied to pin ⑲of IC107?
OPEN
CLOSE
ON
Defective LMT SW and/or connector.
YES
Defective IC107.
does it produce about 2.8V at pin⑤ of IC101 in "L" mode at pin ㉗ of IC101?
ON
Defective IC107, pattern and/or surrounding circutry.
YES
Is power supplied to laser Q101? (101 collector : about 2.0V)
ON
Defective connector.
YES
Does laser current flow? 1.0V across R134//144.
R134//144≫1.0V
YES
defective Q101 and/or laser.
R134//144≪1.0V
YES
Defective laser and/or connector.

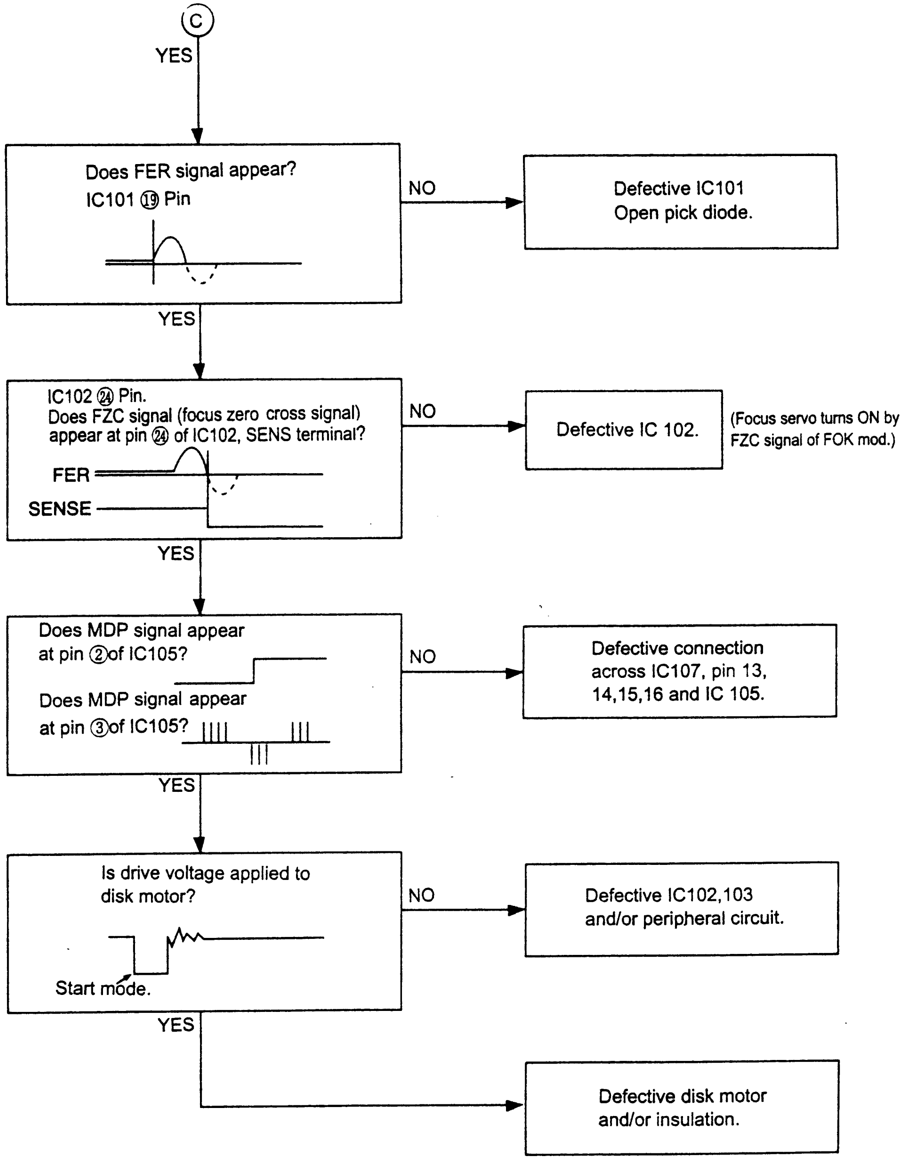

Ⓑ
Laser lights.
Does lens move up/down?
NO
Does IC102 output forcus search signal?
IC102 PIN⑪ (FEO)
NO
Defective IC102 and/or C118.
YES
Is focus search signal applied to pin ③ of IC103?
NO
Defective IC103
YES
Open activator and/or connector
YES
Confim initial read with disc
Does TP101 HF signal appear even in low level?
NO
Open connector and/or defective IC101
YES
Is laser output adjustment correct?
NO
Incorrect turntable height. Degraded laser diode
YES
Does Fok (focus ok) signal appear? (TP101 HF, REF 0.4V)
NO
Defective IC101
Is Fok signal applied to pin ㊱ of IC107?
ON
Open pattern
YES
Ⓒ


Ⓐ
Laser does not light.
Is "L" applied to pin ⑦ of IC107?
YES
NO
Did pickup return to innermost circular?
NO
Is data transferred from IC107?
NO
Defective IC107
YES
Does voltage appear at IC103 pin ①?
ON
Defective IC102, 103
YES
Defective slide motor and/or connector.
NO
Defective IC103.
Does it stop at inner pick circular after shift?
YES
Is defect output from LM SW applied to pin ⑲of IC107?
OPEN
CLOSE
ON
Defective LMT SW and/or connector.
YES
Defective IC107.
does it produce about 2.8V at pin⑤ of IC101 in "L" mode at pin ㉗ of IC101?
ON
Defective IC107, pattern and/or surrounding circutry.
YES
Is power supplied to laser Q101? (101 collector : about 2.0V)
ON
Defective connector.
YES
Does laser current flow? 1.0V across R134//144.
R134//144≫1.0V
YES
defective Q101 and/or laser.
R134//144≪1.0V
YES
Defective laser and/or connector.

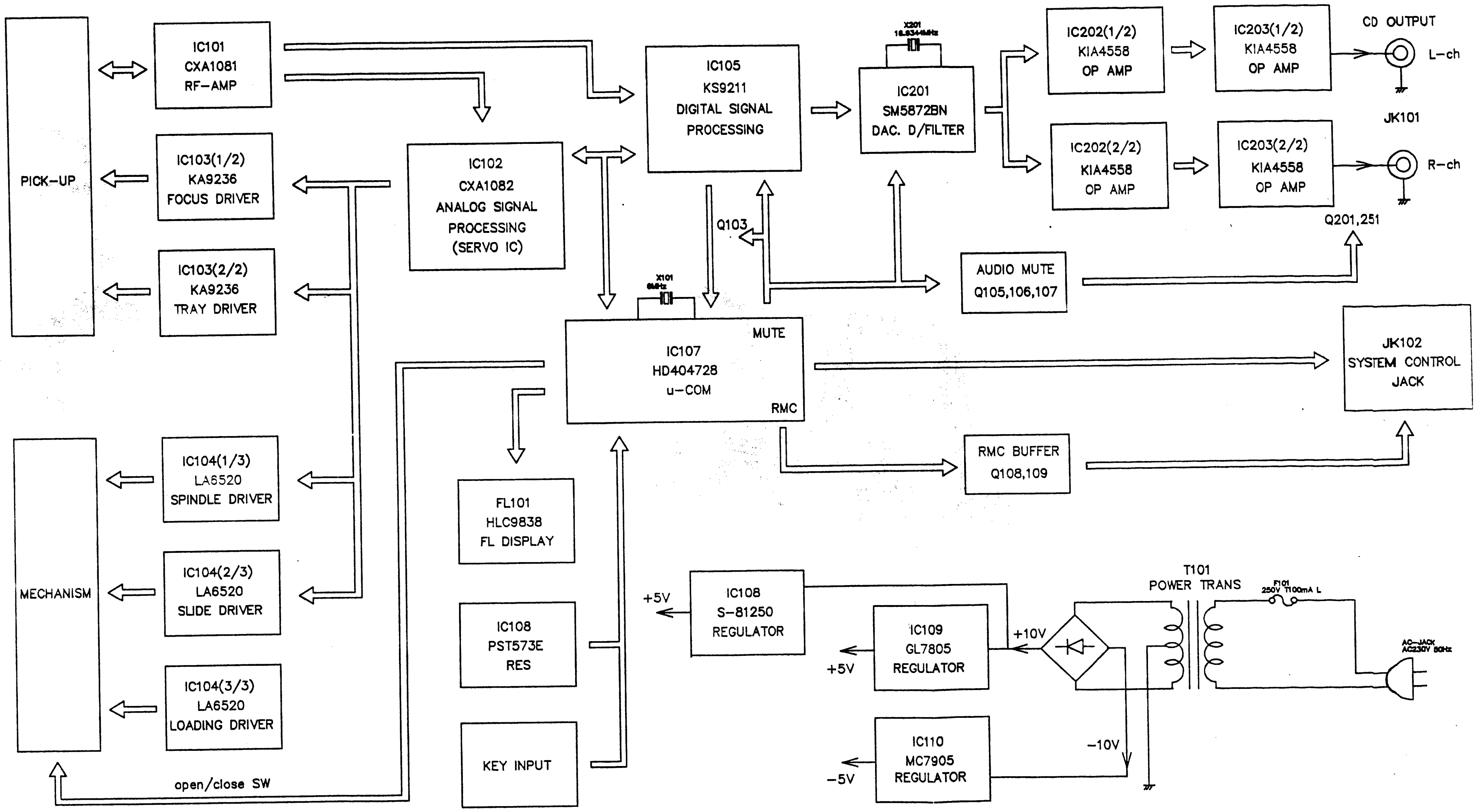

Ⓑ
Laser lights.
Does lens move up/down?
NO
Does IC102 output forcus search signal?
IC102 PIN⑪ (FEO)
NO
Defective IC102 and/or C118.
YES
Is focus search signal applied to pin ③ of IC103?
NO
Defective IC103
YES
Open activator and/or connector
YES
Confirm initial read with disc
Does TP101 HF signal appear even in low level?
NO
Open connector and/or defective IC101
YES
Is laser output adjustment correct?
NO
Incorrect turntable height. Degraded laser diode
YES
Does Fok (focus ok) signal appear? (TP101 HF, REF 0.4V)
NO
Defective IC101
Is Fok signal applied to pin ㊱ of IC107?
ON
Open pattern
YES
Ⓒ


A
Laser does not light.
Is "L" applied to pin ⑦ of IC107?
YES
NO
Did pickup return to innermost circular?
NO
Is data transferred from IC107?
NO
Defective IC107
YES
Does voltage appear at IC103 pin ①?
ON
Defective IC102, 103
YES
Defective slide motor and/or connector.
NO
Defective IC103.
Does it stop at inner pick circular after shift?
YES
Is defect output from LM SW applied to pin ⑲of IC107?
OPEN
CLOSE
ON
Defective LMT SW and/or connector.
YES
Defective IC107.
does it produce about 2.8V at pin⑤ of IC101 in "L" mode at pin ㉗ of IC101?
ON
Defective IC107, pattern and/or surrounding circutry.
YES
Is power supplied to laser Q101? (101 collector : about 2.0V)
ON
Defective connector.
YES
Does laser current flow? 1.0V across R134//144.
R134//144≫1.0V
YES
defective Q101 and/or laser.
R134//144≪1.0V
YES
Defective laser and/or connector.

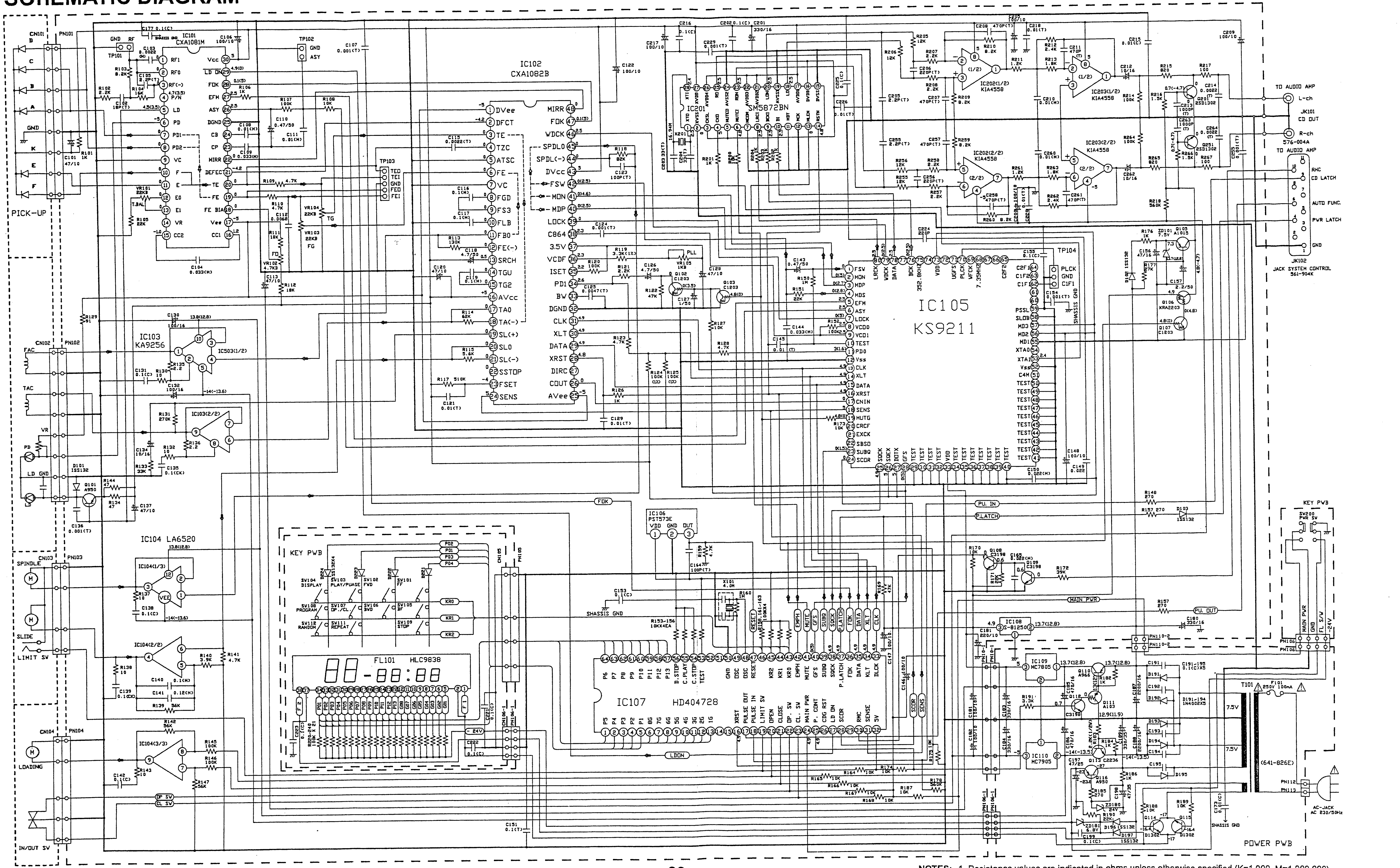

B
Laser lights.
Does lens move up/down?
NO
Does IC102 output forcus search signal?
IC102 PIN⑪ (FEO)
NO
Defective IC102 and/or C118.
YES
Is focus search signal applied to pin ③ of IC103?
NO
Defective IC103
YES
Open activator and/or connector
YES
Confirm initial read with disc
Does TP101 HF signal appear even in low level?
NO
Open connector and/or defective IC101
YES
Is laser output adjustment correct?
NO
Incorrect turntable height. Degraded laser diode
YES
Does Fok (focus ok) signal appear? (TP101 HF, REF 0.4V)
NO
Defective IC101
Is Fok signal applied to pin ㊱ of IC107?
ON
Open pattern
YES
C


C
YES
Does FER signal appear?
IC101 ⑲ Pin
NO
Defective IC101
Open pick diode.
YES
IC102 ㉔ Pin.
Does FZC signal (focus zero cross signal) appear at pin ㉔ of IC102, SENS terminal?
FER
SENSE
NO
Defective IC 102.
(Focus servo turns ON by FZC signal of FOK mod.)
YES
Does MDP signal appear at pin ②of IC105?
Does MDP signal appear at pin ③of IC105?
NO
Defective connection across IC107, pin 13, 14,15,16 and IC 105.
YES
Is drive voltage applied to disk motor?
Start mode.
NO
Defective IC102,103 and/or peripheral circuit.
YES
Defective disk motor and/or insulation.

BLOCK DIAGRAM


PICK-UP
IC101
CXA1081
RF-AMP
IC103(1/2)
KA9236
FOCUS DRIVER
IC103(2/2)
KA9236
TRAY DRIVER
IC102
CXA1082
ANALOG SIGNAL
PROCESSING
(SERVO IC)
IC105
KS9211
DIGITAL SIGNAL
PROCESSING
X201
16.9344MHz
IC201
SM5872BN
DAC. D/FILTER
IC202(1/2)
KIA4558
OP AMP
IC202(2/2)
KIA4558
OP AMP
IC203(1/2)
KIA4558
OP AMP
IC203(2/2)
KIA4558
OP AMP
CD OUTPUT
L-ch
JK101
R-ch
Q201,251
Q103
AUDIO MUTE
Q105,106,107
X101
6MHz
IC107
HD404728
u-COM
MUTE
RMC
JK102
SYSTEM CONTROL
JACK
RMC BUFFER
Q108,109
MECHANISM
IC104(1/3)
LA6520
SPINDLE DRIVER
IC104(2/3)
LA6520
SLIDE DRIVER
IC104(3/3)
LA6520
LOADING DRIVER
open/close SW
FL101
HLC9838
FL DISPLAY
IC108
PST573E
RES
KEY INPUT
+5V
IC108
S-81250
REGULATOR
IC109
GL7805
REGULATOR
+5V
+10V
IC110
MC7905
REGULATOR
-5V
-10V
T101
POWER TRANS
F101
250V T100mA L
AC-JACK
AC230V 50Hz

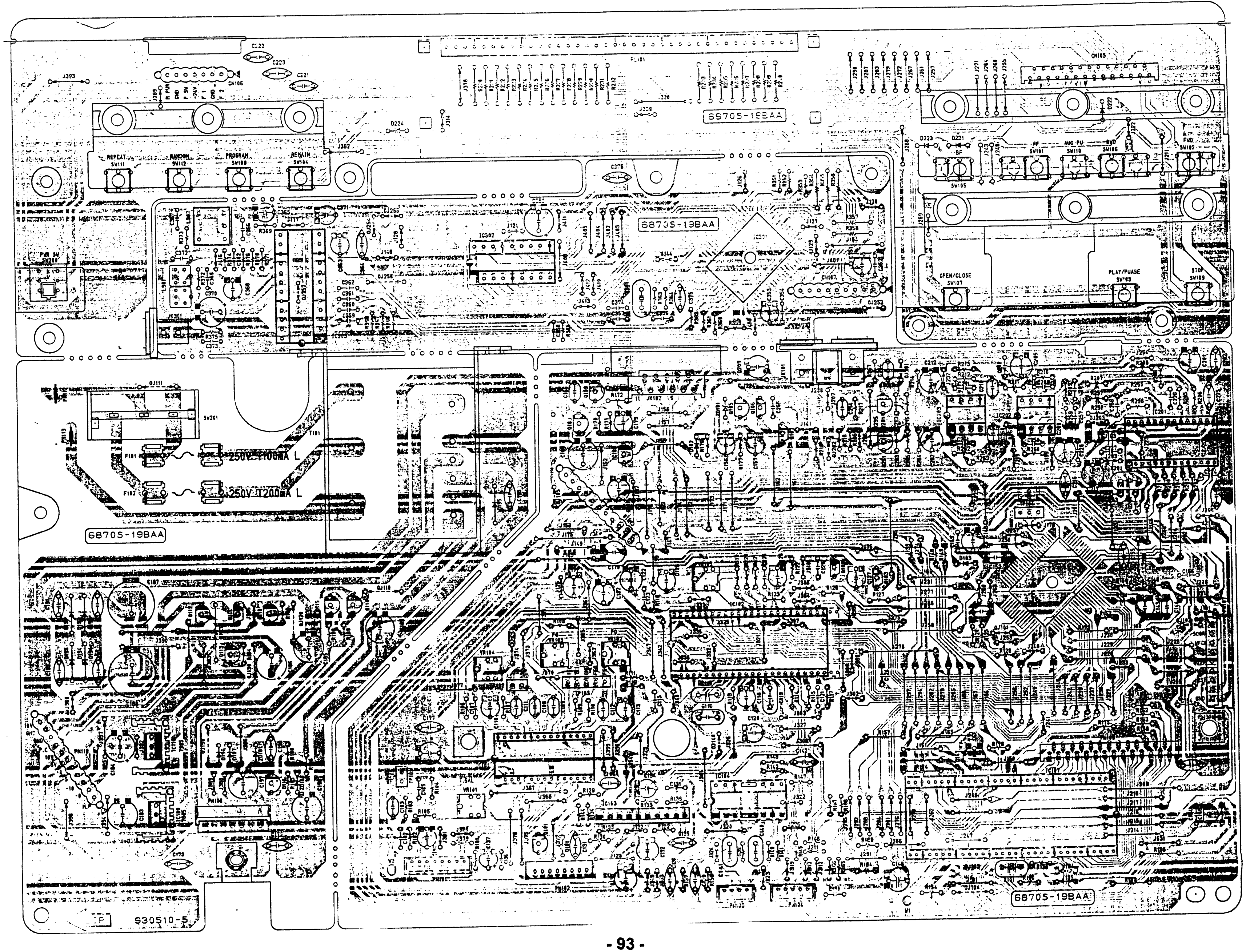
SCHEMATIC DIAGRAM



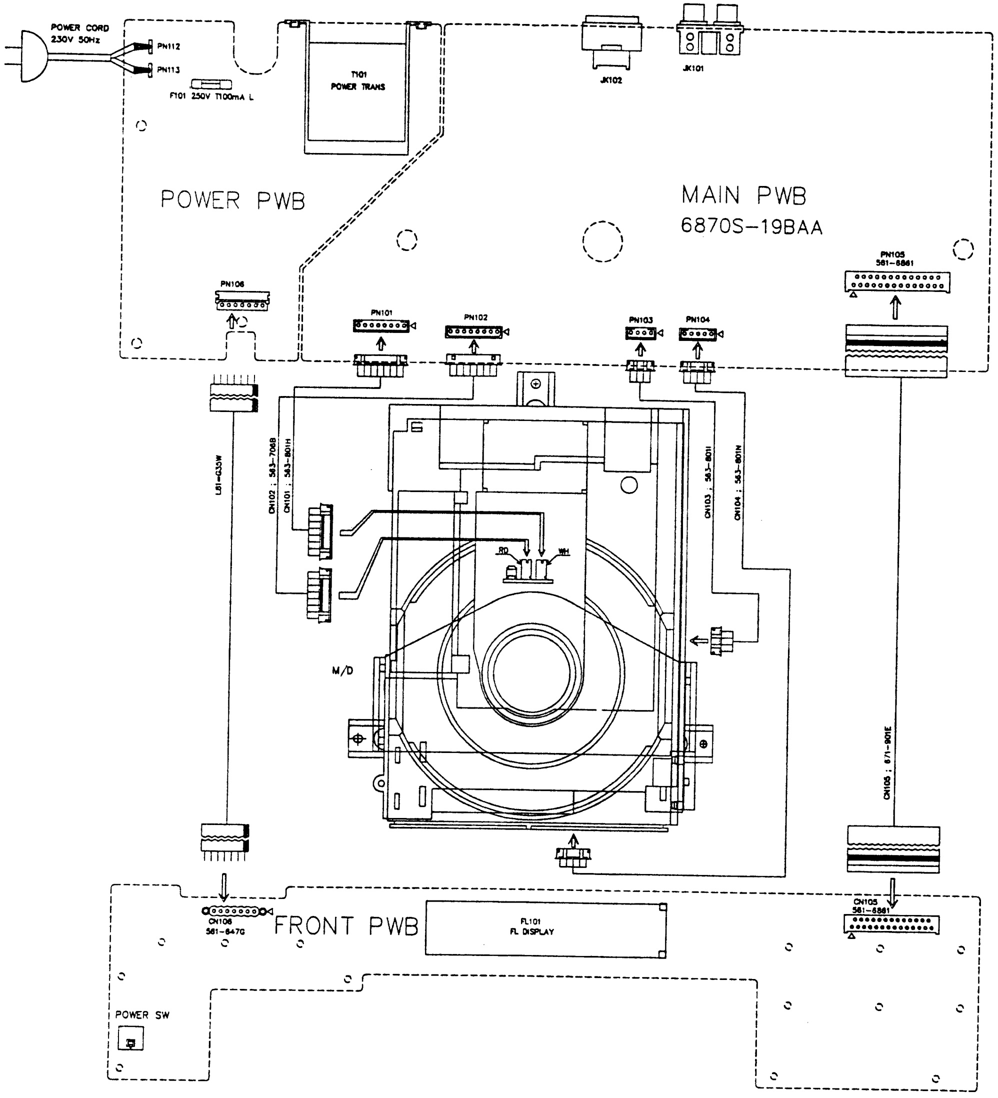
PICK-UP
CN101
PN101
IC101 CXA1081M
IC102 CXA1082B
IC103 KA9256
IC104 LA6520
IC105 KS9211
IC106 PST573E
IC107 HD404728
IC108 S-81250
IC109 MC7805
IC110 MC7905
IC201 SM5872BN
IC202(1/2) KIA4558
IC202(2/2) KIA4558
IC203(1/2) KIA4558
IC203(2/2) KIA4558
TP101
TP102
TP103
TP104
SPINDLE
SLIDE
LIMIT SW
LOADING
IN/OUT SW
KEY PWB
FL101 HLC9838
SV101 FF
SV102 PLAY/PAUSE
SV103 PLAY/PUASE FWD
SV104 DISPLAY
SV105 BF
SV106 BVD
SV107 OP./CL
SV108 PROGRAM
SV109 STOP
SV111 REPEAT
SV112 RANDOM
SHASSIS GND
TO AUDIO AMP
L-ch
JK101 CD OUT
R-ch
576-004A
TO AUDIO AMP
RMC
CD LATCH
AUTO FUNC.
PWR LATCH
GND
JK102 JACK SYSTEM CONTROL 561-904K
KEY PWB
SW200 PWR SW
MAIN PWR
FL 5/V
-24V
POWER PWB
T101
F101 250V 100mA
(641-826E)
AC-JACK AC 230/50Hz
7.5V
X101 4.0M
X201 16.94M
FDK
PU. IN
P.LATCH
MAIN PWR
PU. OUT
LDON
OP SW
CL SW

NOTES: 1. Resistance values are indicated in ohms unless otherwise specified (K=1,000. M=1,000,000).
2. Capacitance values are shown in microfarads unless otherwise (P=MICRO-MICRO FARADS).

PCB LAYOUT


REPEAT
SW111
RANDOM
SW112
PROGRAM
SW108
REMAIN
SW104
6870S-19BAA
6870S-19BAA
CN105
CN106
PL101
OPEN/CLOSE
SW107
PLAY/PUASE
SW103
STOP
SW109
SW105
SW201
T101
F101
F102
250V T100mA L
250V T200mA L
6870S-19BAA
6870S-19BAA
IC102
IC501
IC302
930510-5
P

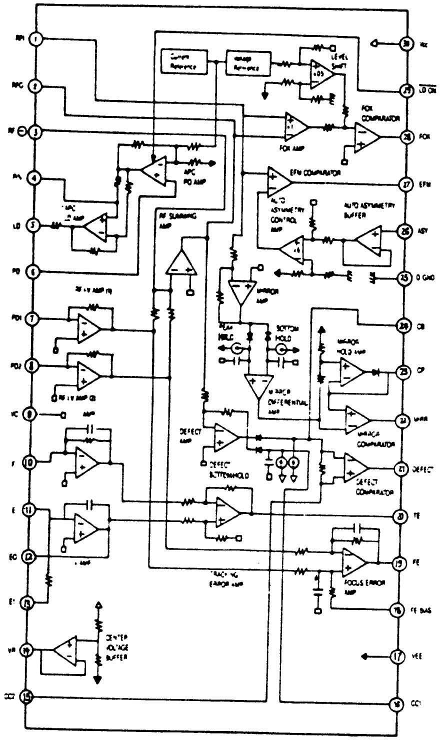
WIRING DIAGRAM


POWER CORD
230V 50Hz
PN112
PN113
F101 250V T100mA L
T101
POWER TRANS
JK102
JK101
POWER PWB
MAIN PWB
6870S-19BAA
PN105
561-6861
PN106
PN101
PN102
PN103
PN104
L81-G35W
CN102 ; 563-706B
CN101 ; 563-801H
CN103 ; 563-801I
CN104 ; 563-801N
RD
WH
M/D
CN105 ; 671-901E
FRONT PWB
CN106
561-647G
FL101
FL DISPLAY
CN105
561-6861
POWER SW

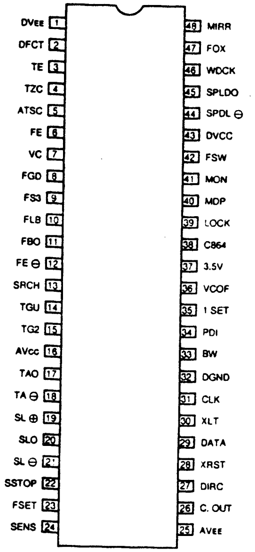
-94-

INTERNAL BLOCK DIAGRAM OF ICs

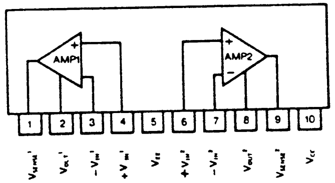
• CXA1081S


Current Reference
Voltage Reference
LEVEL SHIFT
FOK COMPARATOR
FOK AMP
APC PD AMP
EFM COMPARATOR
APC LD AMP
RF SUMMING AMP
AUTO ASYMMETRY CONTROL AMP
AUTO ASYMMETRY BUFFER
MIRROR AMP
RF I-V AMP (1)
RF I-V AMP (2)
PEAK HOLD
BOTTOM HOLD
MIRROR HOLD AMP
MIRROR DIFFERENTIAL AMP
DEFECT AMP
DEFECT BOTTOM HOLD
MIRROR COMPARATOR
DEFECT COMPARATOR
TRACKING ERROR AMP
FOCUS ERROR AMP
CENTER VOLTAGE BUFFER
RFC
RF ⊖
PD
PD1
PD2
VC
F
E
EO
VR
LD ON
FOK
EFM
ASY
D GND
CB
CP
MIRR
DEFECT
TE
FE
FE BIAS
VEE
CC1

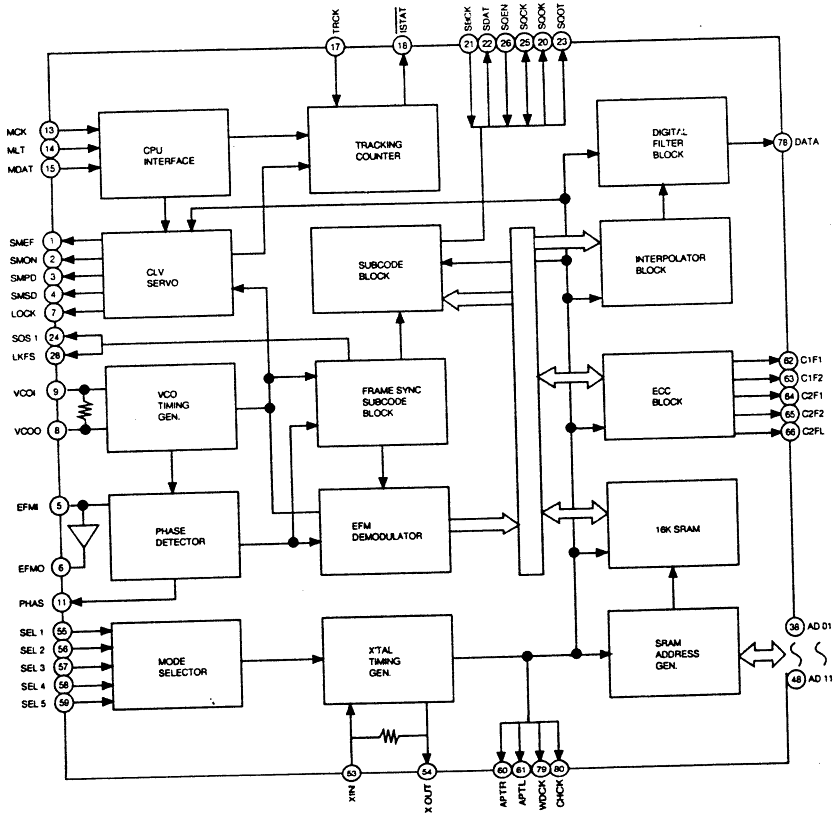
• CXA1082BS


DVEE 1
DFCT 2
TE 3
TZC 4
ATSC 5
FE 6
VC 7
FGD 8
FS3 9
FLB 10
FBO 11
FE ⊖ 12
SRCH 13
TGU 14
TG2 15
AVcc 16
TAO 17
TA ⊖ 18
SL ⊕ 19
SLO 20
SL ⊖ 21
SSTOP 22
FSET 23
SENS 24
48 MIRR
47 FOX
46 WDCK
45 SPLDO
44 SPDL ⊖
43 DVCC
42 FSW
41 MON
40 MDP
39 LOCK
38 C864
37 3.5V
36 VCOF
35 1 SET
34 PDI
33 BW
32 DGND
31 CLK
30 XLT
29 DATA
28 XRST
27 DIRC
26 C. OUT
25 AVEE

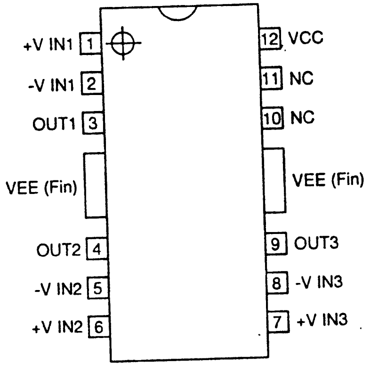
• KA9256

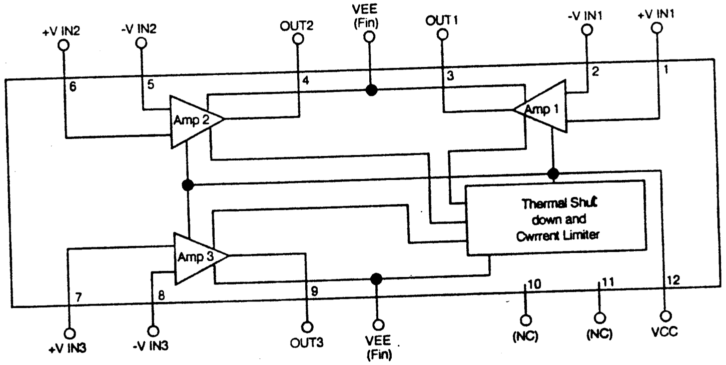

AMP1
AMP2
+
−
1
2
3
4
5
6
7
8
9
10
VSENSE1
VOUT1
−VIN1
+VIN1
VEE
+VIN2
−VIN2
VOUT2
VSENSE2
VCC

• KS9211

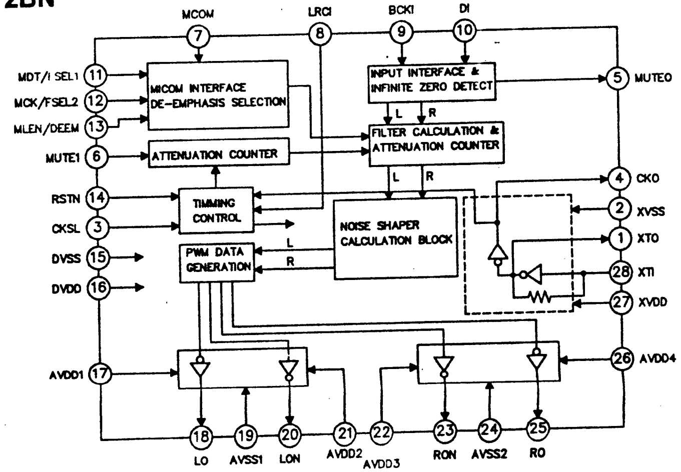

TRCK
ISTAT
SBCK
SDAT
SQEN
SQCK
SQOK
SQOT
17
18
21
22
26
25
20
23
MCK 13
MLT 14
MDAT 15
CPU INTERFACE
TRACKING COUNTER
DIGITAL FILTER BLOCK
76 DATA
SMEF 1
SMON 2
SMPD 3
SMSD 4
LOCK 7
SOS 1 24
LKFS 28
CLV SERVO
SUBCODE BLOCK
INTERPOLATOR BLOCK
VCOI 9
VCOO 8
VCO TIMING GEN.
FRAME SYNC SUBCODE BLOCK
ECC BLOCK
62 C1F1
63 C1F2
64 C2F1
65 C2F2
66 C2FL
EFMI 5
EFMO 6
PHAS 11
PHASE DETECTOR
EFM DEMODULATOR
16K SRAM
SEL 1 55
SEL 2 56
SEL 3 57
SEL 4 58
SEL 5 59
MODE SELECTOR
X'TAL TIMING GEN.
SRAM ADDRESS GEN.
38 AD 01
48 AD 11
53 XIN
54 X OUT
60 APTR
61 APTL
79 WDCK
80 CHCK

• LA6520


+V IN1 1
-V IN1 2
OUT1 3
VEE (Fin)
OUT2 4
-V IN2 5
+V IN2 6
12 VCC
11 NC
10 NC
VEE (Fin)
9 OUT3
8 -V IN3
7 +V IN3

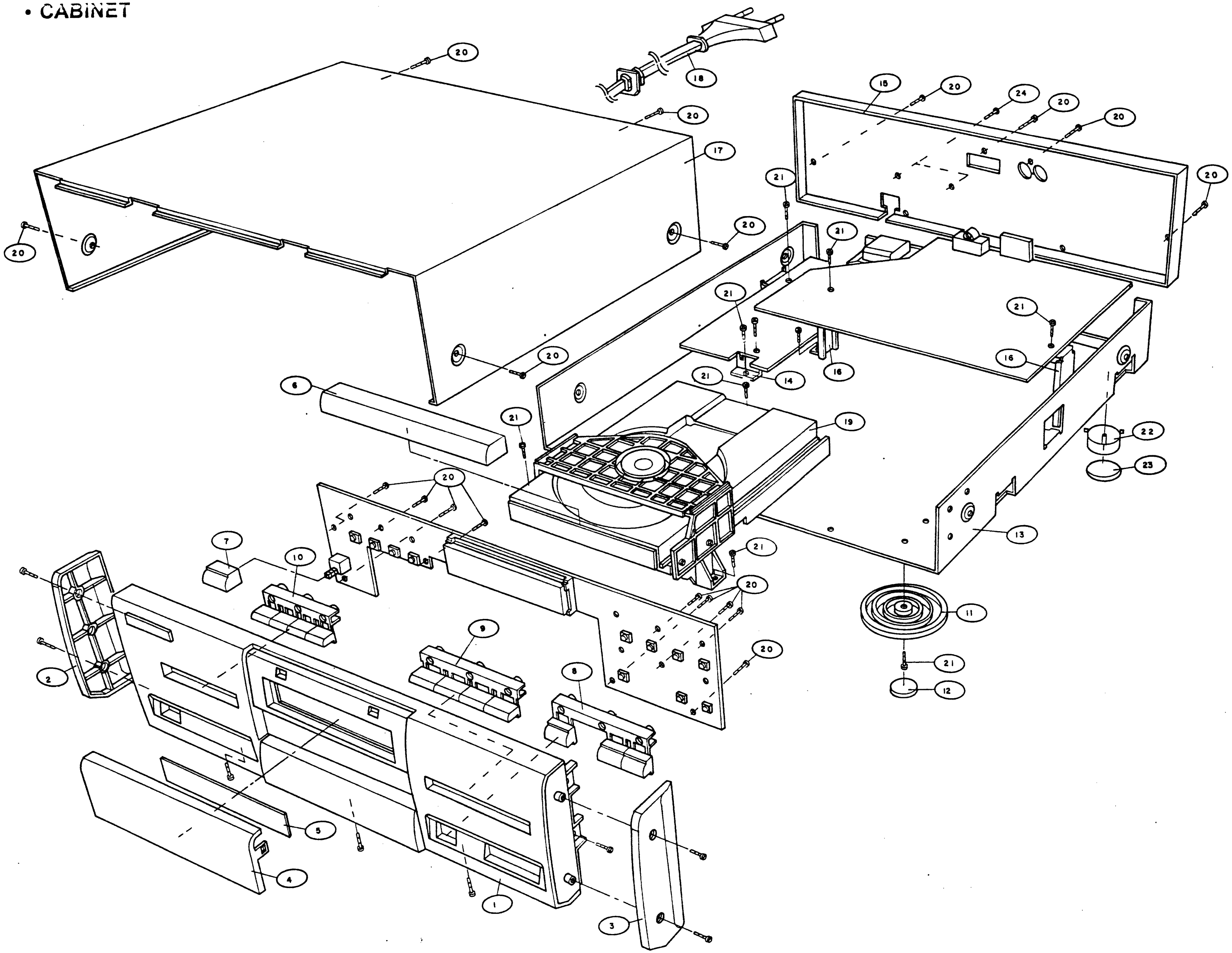

+V IN2
-V IN2
OUT2
VEE (Fin)
OUT1
-V IN1
+V IN1
6
5
4
3
2
1
Amp 2
Amp 1
Amp 3
Thermal Shut down and Current Limiter
7
8
9
10
11
12
+V IN3
-V IN3
OUT3
VEE (Fin)
(NC)
(NC)
VCC

• SM5872BN


MCOM 7
LRCI 8
BCKI 9
DI 10
MDT/I SEL1 11
MCK/FSEL2 12
MLEN/DEEM 13
MUTE1 6
RSTN 14
CKSL 3
DVSS 15
DVDD 16
AVDD1 17
MICOM INTERFACE DE-EMPHASIS SELECTION
ATTENUATION COUNTER
INPUT INTERFACE & INFINITE ZERO DETECT
FILTER CALCULATION & ATTENUATION COUNTER
TIMMING CONTROL
PWM DATA GENERATION
NOISE SHAPER CALCULATION BLOCK
L
R
5 MUTEO
4 CKO
2 XVSS
1 XTO
28 XTI
27 XVDD
26 AVDD4
18 LO
19 AVSS1
20 LON
21 AVDD2
22 AVDD3
23 RON
24 AVSS2
25 RO

EXPLODED VIEW/PARTS LIST

• CABINET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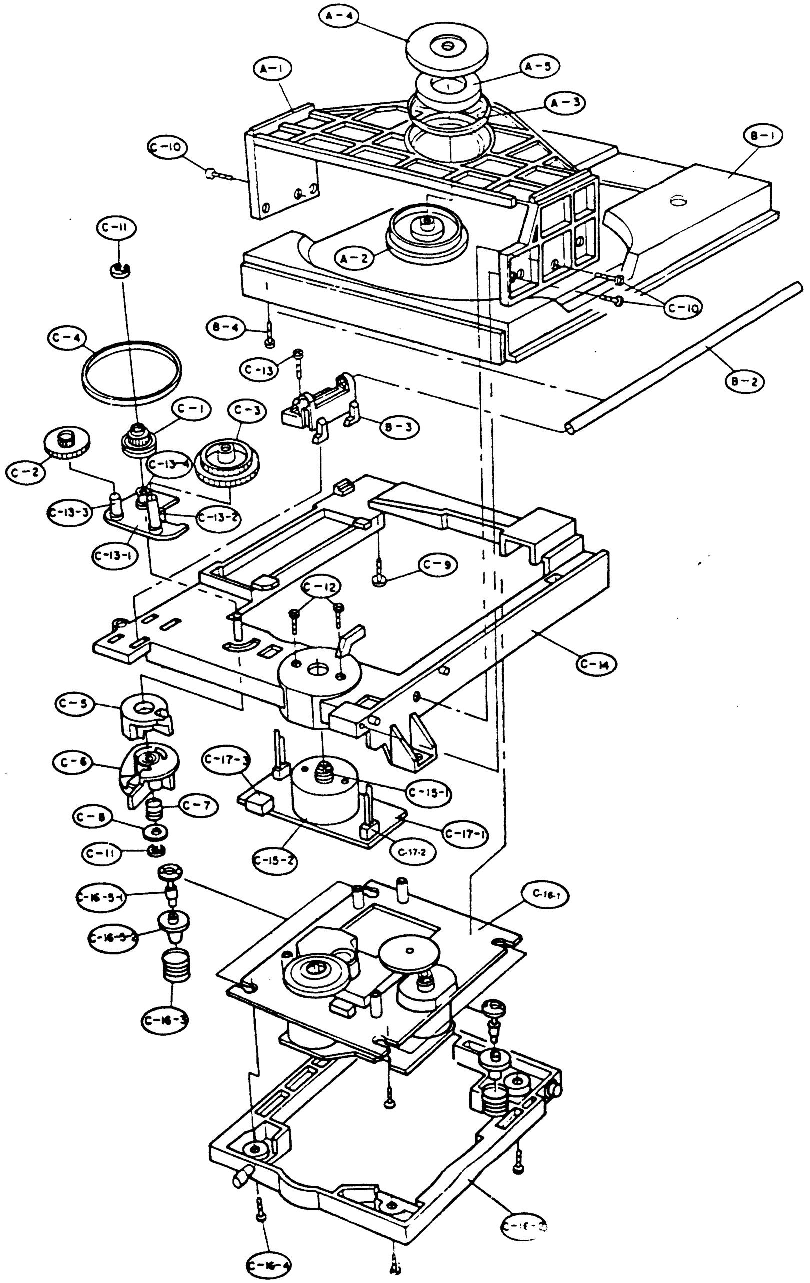
REF. NO.	PART NO.	DESCRIPTION	Q'TY
1	3720S-0045B	Panel, Front	1
2	246-518B	Decoration, Side (B)– L	1
3	246-519B	Decoration, Side (B)– R	1
4	236-943A	Window, Display	1
5	231-237A	Sheet, Filter	1
6	226-532B	Door, CD	1
7	4940S-0216A	Knob, Push	1
8	4940S-0224B	Knob, CD Play	1
9	4940S-0229A	Knob, CD Search	1
10	4940S-0230A	Knob, CD Function	1
11	265-021A	Foot, Front	2
12	472-190C	Felt	2
13	3140S-0018C	Chassis, Main	1
14	4810S-0505A	Bracket, PCB	1
15	3720S-0060C	Panel, Back	1
16	4810S-0506A	Bracket, CD Main	2
17	213-533A	Cabinet, Top	1
18	681-005A	Cord, Power	1
19	411-044A	Mechanism Assembly, CDM-X200	1
20	353-025C	Screw, Special 3x10	23
21	1TRL0302018	Screw, 3x6	15
22	265-004A	Foot, Rubber	2
23	472-610F	Felt	2
24	353-070C	Screw, 4x12	2

• CD MECHANISM



REF.NO.	DESCRIPTION	PART NO.	Q'TY
·	Mechanism Assembly, CDM-X200	411-044A	1
A	SUPPORTER, CLAMP AY	322-321A	1
A-1	SUPPORTER, CLAMP	322-322A	1
A-2	CLAMP, DISC	327-013A	1
A-3	GUIDE, MAGNET	384-064A	1
A-4	COVER, MAGNET	221-527A	1
A-5	COVER, CLAMP MAGNET	524-012A	1
B	TRAY, DISC AY	318-317A	1
B-1	TRAY, DISC	318-318A	1
B-2	SHAFT, LOADING	423-423A	1
B-3	GUIDE, SHAFT	384-384A	1
B-4	SCREW, SPECIAL	353S353D	1
C	BASE, AY	225-224A	1
C-1	GEAR, PULLEY	435-435A	1
C-2	GEAR, MIDDLE	435-436A	1
C-3	GEAR, LOADING	435-437A	1
C-4	BELT, COUNTER	451-145U	1
C-5	CAM AY, UP	374-374A	1
C-6	CAM AY, DOWN	374-375A	1
C-7	SPRING, COM	442-778A	1
C-8	WASHER, PLATE	354S354A	1
C-9	SCREW, WASHER	353S353B	1
C-10	SCREW, BIND	353S353C	3
C-11	RING-E	345S345A	2
C-12	SCREW, BIND MACHINE	353S353F	2
C-13	PLATE, SCALE AY	252-252A	1
C-13-1	PLATE, SCALE AY	252-253A	1
C-13-2	PIN PULLEY	356-356A	1
C-13-3	PIN MIDDLE	356-357A	1
C-13-4	BUSHING, PULLEY	341-341A	1
C-14	BASE, LOADING AY	225-225A	1
C-15	MOTOR AY	414-043A	1
C-15-1	PULLEY, MOTOR	432-432A	1
C-15-2	MOTOR (RF500TB-14415; MABUCHI)	414-044A	1
C-16	BASE, PU AY	225-228A	1
C-16-1	MECHA, AY (KSM-2101AAM, SONY)	411-045A	1
C-16-2	BASE, PU	225-229A	1
C-16-3	SPRING, ANTI-VIB.	442-717A	4
C-16-4	SCREW, WASHER	353S353A	4
C-16-5	SUPPORTER, SPRING AY	322-324A	4
C-16-5-1	SUPPORTER, SPRING	322-323A	4
C-16-5-2	RUBBER, ANTI-VIB.	477-106A	4
C-17	PWB AY	6870S-158AA	1
C-17-1	PWB, LOADING AY	6870S-159AA	1
C-17-2	S/W, SPECIAL (MSW18020MVJ0; MIC)	558-041A	2
C-17-3	CONNECTOR AY, WAFER(S5B-PH; JST)	563E010A	1

[REPLACEMENT PARTS LIST]

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S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
			213-533A	CABINET	TOP (FT-532 BG1)	
			221-527A	COVER	MAGNET (SECC 0.8T)	
			225-224A	BASE	ASSY	
			225-225A	BASE	LOADING ASS'Y	
			225-226A	BASE	LOADING (LEXAN 141,BK)	
			225-228A	BASE	P/U ASSY	
			225-229A	BASE	P/U (LUPOX GP2300,BK)	
			226-532B	DOOR	CD (FHK532 BU3)	
			231-237A	SHEET	FILTER (FT-532 BG1)	
			236-943A	WINDOW	DISPLAY (FT-532L BG1)	
			246-518B	DECORATION	SIDE(B)-L (FT-532L BU2)	
			246-519B	DECORATION	SIDE(B)-R (FT-532L BU2)	
			252-252A	PLATE SCALE	ASS'Y	
			252-253A	PLATE SCALE	LOADING (SECC 1.2T)	
			265-021A	FOOT	FRONT (FA-532 BG1)	
			265-022A	FOOT	RUBBER (FA-532 BG1)	
			3140S-0018C	CHASSIS	MAIN (FH-532)	
			318-317A	TRAY	DISC ASSY	
			318-318A	TRAY	DISC (LUCKEY ABS XR-401,BK)	
			322-321A	SUPPORTER	CLAMP ASSY	
			322-322A	SUPPORTER	CLAMP (LEXAN 141,BK)	
			322-323A	SUPPORTER	SPRING (LUPOX GP2300,BK)	
			322-324A	SUPPORTER	SPRING ASSY	
			324-091A	HOLDER	FIP (FT/FH-909 KW1)	
			327-013A	CLAMP	DISC (DURACON M90-44,BK)	
			341-341A	BUSHING	PULLEY (C3604BD-F)	
			345S345A	RING	E (02)	
			353-070C	SCREW	* TAPPING,WASHER 4X12 FBK	
			353S353A	SCREW	WASHER (09X026L,FZMY)	
			353S353B	SCREW	WASHER (012X03X8L,FZMY)	
			353S353C	SCREW	+ BIND (03X8L,FBK)	
			353S353D	SCREW	SPECIAL (0.2X6L,FBK)	
			353S353E	SCREW	+ BIND (03X8L,FBK)	
			353S353F	SCREW	+BIND MACHINE (M2.6X4L,FBK)	
			354S354A	WASHER	PLATE (010X03.2X0.5T)	
			356-356A	PIN	PULLEY (SUS 303)	
			356-357A	PIN	MIDDLE (SUS 303)	
			3720S-0045B	PANEL	FRONT (FHK532 BU3)	
			3720S-0060C	PANEL	BACK (FHK532 BU3)	
			374-374A	CAM ASSY	UP (DURACON M90-44,BK)	
			374-375A	CAM ASSY	DOWN (DURACON M90-44,BK)	
			384-064A	GUIDE	MAGNET (EVA 1.5T,BK)	
			384-384A	GUIDE	SHAFT(DURACON M90-44,BK)	
			3875S-5035A	MANUAL, OPERATION ASSY	FHK532 BU3	
			411-044A	MECHANISM ASSY	CDM-X200	
			411-045A	MECHANISM ASSY	KSM-2101AAM (SONY)	
			414-043A	MOTOR	MOTOR ASSY	
			414-044A	MOTOR	RF500TB-14415 (MABUCHI)	
			421-421A	SHAFT ASSY TUNING	BASE (SUS 303)	
			423-423A	SHAFT	LOADING (SUS420J2)	

⌞REPLACEMENT PARTS LIST⌝

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
			432-432A	PULLEY	MOTOR (DURACON M90-44,BK)	
			435-435A	GEAR	PULLEY (DURACON M90-44,BK)	
			435-436A	GEAR	MIDDLE (NYCON 12,BK)	
			435-437A	GEAR	LOADING (DURACON M90-44,BK)	
			442-717A	SPRING	ANTI-VIB (SUS 304 WPB, 0.55)	
			442-778A	SPRING	COM (SUS 304PB,00.7)	
			451-145U	BELT	COUNTER (CR RUBBER)	
			472-190C	FELT		
			477-106A	RUBBER	ANTI-VIB (IIR,RUBBER)	
			4810S-0505A	BRACKET	PCB (FT-532 BG1)	
			4810S-0506A	BRACKET	CD MAIN (FH-532 BG1)	
			4940S-0216A	KNOB	PUSH(FA-532 BG1)	
			4940S-0224B	KNOB	CD PLAY (FK-532)	
			4940S-0229A	KNOB	CD SEARCH (FH-532 BG1)	
			4940S-0230A	KNOB	CD FUNCTION (FH-532 BG1)	
			524-012A	COVER	CLAMP MAGNET (030X018X5T)	
			558-041A	SWITCH SPECIAL	MIC (MSW 18020 MVJO)	
			563-703A	CONNECTOR ASSY	CGF1311-0101X2 2468#24 500SMK	
			563E010A	CONNECTOR ASSY	WAFER (JST S5B-PH(5P))	
			564-017E	PLUG CONTACT CORD,PHONE	700M/M NON UL	
			586-001C	FUSE HOLDER	PIN-T 5X20 KS	(S)
			681-005A	CORD POWER	681-004F+B172 KDK	
			6871S-19BAC	PWB ASSY	(FHK532 BG2)	
			6871SX19BAA	PWB ASSY	FHK532 MAIN	
			6871SY19BAA	PWB ASSY	FHK532 PWR	
			6871SZ19BAA	PWB ASSY	FHK532 FRONT	
		CN105	671-901E	LEAD SET	FFC 27P 250 GS CABLE	
		CN106	L81=630W	LEAD SET	FLAT UL2877#24-7 300 W/K-K	
		CN110	L81=K24W	LEAD SET	FLAT UL2877#24-11 240 W/K-K	
		C101	0CE4766D618	CAPACITOR,ELECTROLYTIC	47M SMS 10V M FL TP(5)	
		C102	0CX1800K518	CAPACITOR TUBULA(T.C)	18P 50V K NPO TA26	
		C103	0CQ2221N409	CAPACITOR POLYESTER(MYLAR)	0.0022U 100V J POLY TP	
		C104	0CQ3331N409	CAPACITOR POLYESTER(MYLAR)	0.033U 100V J POLY TP	
		C105	0CX2R20K478	CAPACITOR TUBULA(T.C)	2.2P 50V J N750 TA26	
		C106	0CE1076D618	CAPACITOR,ELECTROLYTIC	100M SMS 10V M FM5 TP(5)	
		C107	0CN1020K518	CAPACITOR TUBULA(HIGH DIELE)	1000P 50V K B TA26	
		C108	0CQ1031N409	CAPACITOR POLYESTER(MYLAR)	0.01U 100V J POLY TP	
		C109	0CQ3331N409	CAPACITOR POLYESTER(MYLAR)	0.033U 100V J POLY TP	
		C110	0CE4746K618	CAPACITOR,ELECTROLYTIC	0.47M SMS 50V M FL TP(5)	
		C111	0CQ1031N409	CAPACITOR POLYESTER(MYLAR)	0.01U 100V J POLY TP	
		C112	0CQ6821N409	CAPACITOR POLYESTER(MYLAR)	0.0068U 100V J POLY TP	
		C113	0CE4766D618	CAPACITOR,ELECTROLYTIC	47M SMS 10V M FL TP(5)	
		C115	0CN2220F668	CAPACITOR TUBULA(HIGH DIELE)	2200P 16V M X TA26	
		C116	0CQ1041N409	CAPACITOR POLYESTER(MYLAR)	0.1U 100V J POLY TP	
		C117	0CQ1041N409	CAPACITOR POLYESTER(MYLAR)	0.1U 100V J POLY TP	
		C118	0CE4756K618	CAPACITOR,ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C119	0CQ1041N409	CAPACITOR POLYESTER(MYLAR)	0.1U 100V J POLY TP	
		C120	0CE4766D618	CAPACITOR,ELECTROLYTIC	47M SMS 10V M FL TP(5)	
		C121	0CN1030F678	CAPACITOR TUBULA(HIGH DIELE)	0.01M 16V M Y TA26	
		C122	0CE2266D618	CAPACITOR,ELECTROLYTIC	22M SMS 10V M FM5 TP(5)	

⌞REPLACEMENT PARTS LIST⌝

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		C123	0CN1010K518	CAPACITOR TUBULA(HIGH DIELE)	100P 50V K B TA26	
		C124	0CN1020K518	CAPACITOR TUBULA(HIGH DIELE)	1000P 50V K B TA26	
		C125	0CN4720F668	CAPACITOR TUBULA(HIGH DIELE)	4700P 16V M X TA26	
		C126	0CE4756K618	CAPACITOR,ELECTROLYTIC	4.7M SMS 50V M FL TP(5)	
		C127	0CE1056K618	CAPACITOR,ELECTROLYTIC	1.0M SMS 50V M FL TP(5)	
		C128	0CE4766D618	CAPACITOR,ELECTROLYTIC	47M SMS 10V M FL TP(5)	
		C129	0CN1030F678	CAPACITOR TUBULA(HIGH DIELE)	0.01M 16V M Y TA26	
		C130	0CE1076F618	CAPACITOR,ELECTROLYTIC	100M SMS 16V M FM5 TP(5)	
		C131	0CK1040K945	CAPACITOR,CERAMIC(HIGH DIELEC)	0.1UF 50V Z F TS	
		C132	0CE1076F618	CAPACITOR,ELECTROLYTIC	100M SMS 16V M FM5 TP(5)	
		C134	0CE1066F618	CAPACITOR,ELECTROLYTIC	10M SMS 16V M FM5 TP(5)	
		C135	0CK1040K945	CAPACITOR,CERAMIC(HIGH DIELEC)	0.1UF 50V Z F TS	
		C136	0CN1020K518	CAPACITOR TUBULA(HIGH DIELE)	1000P 50V K B TA26	
		C137	0CE4766D618	CAPACITOR,ELECTROLYTIC	47M SMS 10V M FL TP(5)	
		C138	0CK1040K945	CAPACITOR,CERAMIC(HIGH DIELEC)	0.1UF 50V Z F TS	
		C139	0CK1040K945	CAPACITOR,CERAMIC(HIGH DIELEC)	0.1UF 50V Z F TS	
		C140	0CQ1041N409	CAPACITOR POLYESTER(MYLAR)	0.1U 100V J POLY TP	
		C141	0CQ1242N409	CAPACITOR POLYESTER(MYLAR)	0.12UU S 100V J POLY TP	
		C142	0CK1040K945	CAPACITOR,CERAMIC(HIGH DIELEC)	0.1UF 50V Z F TS	
		C143	0CE4746K618	CAPACITOR,ELECTROLYTIC	0.47M SMS 50V M FL TP(5)	
		C144	0CQ3331N409	CAPACITOR POLYESTER(MYLAR)	0.033U 100V J POLY TP	
		C145	0CN1030F678	CAPACITOR TUBULA(HIGH DIELE)	0.01M 16V M Y TA26	
		C146	0CE1076D618	CAPACITOR,ELECTROLYTIC	100M SMS 10V M FM5 TP(5)	
		C147	0CE1076D618	CAPACITOR,ELECTROLYTIC	100M SMS 10V M FM5 TP(5)	
		C148	0CE1076D618	CAPACITOR,ELECTROLYTIC	100M SMS 10V M FM5 TP(5)	
		C149	0CN1030F678	CAPACITOR TUBULA(HIGH DIELE)	0.01M 16V M Y TA26	
		C150	0CQ2231N409	CAPACITOR POLYESTER(MYLAR)	0.022U 100V J POLY TP	
		C151	0CN1040K948	CAPACITOR,TUBULAR(HIGH DIELEC)	0.1UF 50V Z F TA26	
		C153	0CK1040K945	CAPACITOR,CERAMIC(HIGH DIELEC)	0.1UF 50V Z F TS	
		C154	0CN1020K518	CAPACITOR TUBULA(HIGH DIELE)	1000P 50V K B TA26	
		C155	0CK1040K945	CAPACITOR,CERAMIC(HIGH DIELEC)	0.1UF 50V Z F TS	
		C156	0CE4766D618	CAPACITOR,ELECTROLYTIC	47M SMS 10V M FL TP(5)	
		C157	0CE2256K618	CAPACITOR,ELECTROLYTIC	2.2M SMS 50V M FL TP(5)	
		C164	0CN1010K518	CAPACITOR TUBULA(HIGH DIELE)	100P 50V K B TA26	
		C165	0CQ2231N409	CAPACITOR POLYESTER(MYLAR)	0.022U 100V J POLY TP	
		C173	0CK1040K945	CAPACITOR,CERAMIC(HIGH DIELEC)	0.1UF 50V Z F TS	
		C177	0CK1040K945	CAPACITOR,CERAMIC(HIGH DIELEC)	0.1UF 50V Z F TS	
		C179	0CE1076D618	CAPACITOR,ELECTROLYTIC	100M SMS 10V M FM5 TP(5)	
		C180	0CE3376F618	CAPACITOR,ELECTROLYTIC	330M SMS 16V M FM5 TP5	
		C181	0CE2276D618	CAPACITOR,ELECTROLYTIC	220M SMS 10V M FM5 TP(5)	
		C182	0CE1076D618	CAPACITOR,ELECTROLYTIC	100M SMS 10V M FM5 TP(5)	
		C183	0CE3376F618	CAPACITOR,ELECTROLYTIC	330M SMS 16V M FM5 TP5	
		C184	0CE3376F618	CAPACITOR,ELECTROLYTIC	330M SMS 16V M FM5 TP5	
		C185	0CE477CF618	CAPACITOR,ELECTROLYTIC	470UF SHL 16V M FL TP5	
		C186	0CE477CF618	CAPACITOR,ELECTROLYTIC	470UF SHL 16V M FL TP5	
		C187	0CE2286F630	CAPACITOR,ELECTROLYTIC	2200UF SMS 16V 20 FM5	
		C188	0CE2286F630	CAPACITOR,ELECTROLYTIC	2200UF SMS 16V 20 FM5	
		C189	0CE3376J630	CAPACITOR,ELECTROLYTIC	330M SMS 35V M FM5	
		C191	0CK1040K945	CAPACITOR,CERAMIC(HIGH DIELEC)	0.1UF 50V Z F TS	
		C192	0CK1040K945	CAPACITOR,CERAMIC(HIGH DIELEC)	0.1UF 50V Z F TS	

[REPLACEMENT PARTS LIST]

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S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		C193	0CK1040K945	CAPACITOR,CERAMIC(HIGH DIELEC)	0.1UF 50V Z F TS	
		C194	0CK1040K945	CAPACITOR,CERAMIC(HIGH DIELEC)	0.1UF 50V Z F TS	
		C195	0CK1040K945	CAPACITOR,CERAMIC(HIGH DIELEC)	0.1UF 50V Z F TS	
		C197	0CE4766J618	CAPACITOR,ELECTROLYTIC	47M SMS 35V M FM(5) TP(5)	
		C198	0CE4766J618	CAPACITOR,ELECTROLYTIC	47M SMS 35V M FM(5) TP(5)	
		C199	0CK1040K945	CAPACITOR,CERAMIC(HIGH DIELEC)	0.1UF 50V Z F TS	
		C200	0CE1076D618	CAPACITOR,ELECTROLYTIC	100M SMS 10V M FM5 TP(5)	
		C201	0CE3376F618	CAPACITOR,ELECTROLYTIC	330M SMS 16V M FM5 TP5	
		C202	0CK1040K945	CAPACITOR,CERAMIC(HIGH DIELEC)	0.1UF 50V Z F TS	
		C203	0CX3300K408	CAPACITOR TUBULA(T.C)	33P 50V J SL TA26	
		C204	0CX3300K408	CAPACITOR TUBULA(T.C)	33P 50V J SL TA26	
		C205	0CE1076D618	CAPACITOR,ELECTROLYTIC	100M SMS 10V M FM5 TP(5)	
		C206	0CN2210K518	CAPACITOR TUBULA(HIGH DIELE)	220P 50V K B TA26	
		C207	0CN4710K518	CAPACITOR TUBULA(HIGH DIELE)	470P 50V K B TA26	
		C208	0CN4710K518	CAPACITOR TUBULA(HIGH DIELE)	470P 50V K B TA26	
		C209	0CE1076D618	CAPACITOR,ELECTROLYTIC	100M SMS 10V M FM5 TP(5)	
		C210	0CQ1031N409	CAPACITOR POLYESTER(MYLAR)	0.01U 100V J POLY TP	
		C211	0CN4710K518	CAPACITOR TUBULA(HIGH DIELE)	470P 50V K B TA26	
		C212	0CE1066F618	CAPACITOR,ELECTROLYTIC	10M SMS 16V M FM5 TP(5)	
		C213	0CN1020K518	CAPACITOR TUBULA(HIGH DIELE)	1000P 50V K B TA26	
		C214	0CQ2221N409	CAPACITOR POLYESTER(MYLAR)	0.0022U 100V J POLY TP	
		C215	0CK1040K945	CAPACITOR,CERAMIC(HIGH DIELEC)	0.1UF 50V Z F TS	
		C216	0CK1040K945	CAPACITOR,CERAMIC(HIGH DIELEC)	0.1UF 50V Z F TS	
		C217	0CE1076D618	CAPACITOR,ELECTROLYTIC	100M SMS 10V M FM5 TP(5)	
		C218	0CN1030F678	CAPACITOR TUBULA(HIGH DIELE)	0.01M 16V M Y TA26	
		C221	0CK1040K945	CAPACITOR,CERAMIC(HIGH DIELEC)	0.1UF 50V Z F TS	
		C222	0CK1040K945	CAPACITOR,CERAMIC(HIGH DIELEC)	0.1UF 50V Z F TS	
		C223	0CK1040K945	CAPACITOR,CERAMIC(HIGH DIELEC)	0.1UF 50V Z F TS	
		C224	0CN2210K518	CAPACITOR TUBULA(HIGH DIELE)	220P 50V K B TA26	
		C225	0CK1040K945	CAPACITOR,CERAMIC(HIGH DIELEC)	0.1UF 50V Z F TS	
		C226	0CN1030F678	CAPACITOR TUBULA(HIGH DIELE)	0.01M 16V M Y TA26	
		C228	0CN1030F678	CAPACITOR TUBULA(HIGH DIELE)	0.01M 16V M Y TA26	
		C229	0CN1020K518	CAPACITOR TUBULA(HIGH DIELE)	1000P 50V K B TA26	
		C255	0CN1020K518	CAPACITOR TUBULA(HIGH DIELE)	1000P 50V K B TA26	
		C256	0CN2210K518	CAPACITOR TUBULA(HIGH DIELE)	220P 50V K B TA26	
		C257	0CN4710K518	CAPACITOR TUBULA(HIGH DIELE)	470P 50V K B TA26	
		C258	0CN4710K518	CAPACITOR TUBULA(HIGH DIELE)	470P 50V K B TA26	
		C260	0CQ1031N409	CAPACITOR POLYESTER(MYLAR)	0.01U 100V J POLY TP	
		C261	0CN4710K518	CAPACITOR TUBULA(HIGH DIELE)	470P 50V K B TA26	
		C262	0CE1066F618	CAPACITOR,ELECTROLYTIC	10M SMS 16V M FM5 TP(5)	
		C263	0CN1020K518	CAPACITOR TUBULA(HIGH DIELE)	1000P 50V K B TA26	
		C264	0CQ2221N409	CAPACITOR POLYESTER(MYLAR)	0.0022U 100V J POLY TP	
		DW2-N	3890S-C035F	BOX	(FHK532 BU3)	
		D101	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D102	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D103	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D191	0DD400209BA	DIODE	ROIN4002T1A,RECTRON,TP	
		D192	0DD400209BA	DIODE	ROIN4002T1A,RECTRON,TP	
		D193	0DD400209BA	DIODE	ROIN4002T1A,RECTRON,TP	
		D194	0DD400209BA	DIODE	ROIN4002T1A,RECTRON,TP	

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S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		D195	0DD400209BA	DIODE	ROIN4002T1A,RECTRON,TP	
		D196	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D197	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D221	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D222	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D223	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		D224	0DD132009AA	DIODE	1SS132 DETECT,SW TP	
		FL101	659-2500	DISPLAY	8BT-148GK,DIGITRON,FUTABA	
		ZD181	0DZ680009CC	DIODE,ZENER	MTZ6.8C-T-77 ROHM-K	
		F101	0FT1000B513	FUSE TIME LAG	0.1A 250V 5 2X20 G SMK	
		IC101	0IS0108100A	IC, SONY	CXA1081S RF AMP(CD) SONY (S)	
		IC102	0IS0108200A	IC, SONY	CXA1082BS SERVO SP(CD)SONY	
		IC103	0ISS925600A	IC, SAMSUNG SEMICONDUCTOR	KA9256 DRIVE CD S/S	
		IC104	0ISA652000A	IC, SANYO	LA6520 18W-PWR OP AMPSANYO (S)	
		IC105	0ISS921100A	IC,SAMSUNG SEMICONDUCTOR	KS9211 DSP,S/S	
		IC106	0IMT573009A	IC,MITSUMI	PST573E-2 TP 3.9V,MITSUMI	
		IC107	0IHI404728A	IC,HITACHI	HD404728A74S MICOM,HITACH	
		IC108	0ISE812500B	IC,SEIKO	S-81250HG V/REG 12V,SEIKO	
		IC109	0IGS780500A	IC, GOLDSTAR ELECTRON	GL7805 REGULATOR	
		IC109	255-009D	HEAT SINK	(GSU-9300)	
		IC110	0IMO790500A	IC,MOTOROLA	MC7905CT (5V REG 1A), MOTOROLA	
		IC110	255-009D	HEAT SINK	(GSU-9300)	
		IC201	0INP587200A	IC,NPC(NIPPON PREC. CIRCUIT)	SM5872BN DAC+D/FILTER,NPC	
		IC202	0IKE455800A	IC, KEC	KIA4558P 8DIP LIN OP-AMP	
		IC203	0IKE455800A	IC, KEC	KIA4558P 8DIP LIN OP-AMP	
		JK101	576-004A	JACK RCA	JACK,BLOCK S-441A(WH/RD) (S)	
		JK102	561-904K	CONNECTOR	WAFER,SMK CFG1111-0101	
		PN101	561-711H	CONNECTOR	*WAFER,G/S GIL-S-08P-S2T2-EF	
		PN102	561-685H	CONNECTOR	WAFER,KOREA MOLEX 53014-0810	
		PN103	561-711D	CONNECTOR	*WAFER,G/S GIL-S-04P-S2T2-EF	
		PN104	561-711E	CONNECTOR	*WAFER,G/S GIL-S-05P-S2T2-EF	
		PN105	561-6861	CONNECTOR	WAFER,FPC ELCO 8370-271 27PST	
		PN106	561-646G	CONNECTOR	CONNECTOR MLX 520110710,07PIN	
		PN110	561-647K	CONNECTOR	F-WIRE HOLDER MX51052-1100 (S)	
		PN112	561-910C	CONNECTOR	TERMINAL SEMKO PCB-ROCKING	
		PN113	561-910C	CONNECTOR	TERMINAL SEMKO PCB-ROCKING	
		Q101	0TR127109AA	TRANSISTOR	KTA1271-TP-Y (KTA950)KEC	
		Q102	0TR103009AE	TRANSISTOR	KRC103M TP,KEC(KRC1203)	
		Q103	0TR103009AE	TRANSISTOR	KRC103M TP,KEC(KRC1203)	
		Q105	0TR126609AB	TRANSISTOR	KTA1266-GR TP,KEC(KTA1015GR)	
		Q106	0TR103009AF	TRANSISTOR	KRA103M TP,KEC(KRA2203)	
		Q107	0TR103009AE	TRANSISTOR	KRC103M TP,KEC(KRC1203)	
		Q108	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q109	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q110	0TR127309AA	TRANSISTOR	KTA1273-TP-Y (KTA966A)KEC	
		Q111	0TR103009AF	TRANSISTOR	KRA103M TP,KEC(KRA2203)	
		Q112	0TR319809AA	TRANSISTOR	KTC3198-TP-Y (KTC1815)KEC	
		Q113	0TR320509AB	TRANSISTOR	KTC3205-TP-Y (KTC2236A)KEC	
		Q114	0TR130209AA	TRANSISTOR	KTD1302 MUTING TP,KEC	
		Q115	0TR130209AA	TRANSISTOR	KTD1302 MUTING TP,KEC	

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S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		Q116	0TR127109AA	TRANSISTOR	KTA1271-TP-Y (KTA950)KEC	
		Q201	0TR130209AA	TRANSISTOR	KTD1302 MUTING TP,KEC	
		Q251	0TR130209AA	TRANSISTOR	KTD1302 MUTING TP,KEC	
		R101	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R102	0RD2201F608	RESISTOR,FIXED CARBON FILM	2.2K 1/6W 5 TA26	
		R103	0RD8201F608	RESISTOR,FIXED CARBON FILM	8.2K 1/6W 5 TA26	
		R104	0RD1602F608	RESISTOR,FIXED CARBON FILM	16K 1/6W 5 TA26	
		R105	0RD2202F608	RESISTOR,FIXED CARBON FILM	22K 1/6W 5 TA26	
		R106	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R107	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R108	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R109	0RD4701F608	RESISTOR,FIXED CARBON FILM	4.7K 1/6W 5 TA26	
		R110	0RD4701F608	RESISTOR,FIXED CARBON FILM	4.7K 1/6W 5 TA26	
		R111	0RD1802F608	RESISTOR,FIXED CARBON FILM	18K 1/6W 5 TA26	
		R112	0RD1802F608	RESISTOR,FIXED CARBON FILM	18K 1/6W 5 TA26	
		R113	0RD1303F608	RESISTOR,FIXED CARBON FILM	130K 1/6W 5 TA26	
		R114	0RD6202F608	RESISTOR,FIXED CARBON FILM	62K 1/6W 5 TA26	
		R115	0RD5601F608	RESISTOR,FIXED CARBON FILM	5.6K 1/6W 5 TA26	
		R117	0RD5103F608	RESISTOR,FIXED CARBON FILM	510K 1/6W 5 TA26	
		R118	0RD8202F608	RESISTOR,FIXED CARBON FILM	82K 1/6W 5 TA26	
		R119	0RN3321F408	RESISTOR,FIX METAL FILM	3.32K 1/6W 1 TA26	
		R120	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R121	0RD2201F608	RESISTOR,FIXED CARBON FILM	2.2K 1/6W 5 TA26	
		R122	0RD4702F608	RESISTOR,FIXED CARBON FILM	47K 1/6W 5 TA26	
		R123	0RD4701F608	RESISTOR,FIXED CARBON FILM	4.7K 1/6W 5 TA26	
		R124	0RN1003F408	RESISTOR FIX METAL FILM	100K 1/6W 1 TA26	
		R125	0RN1003F408	RESISTOR FIX METAL FILM	100K 1/6W 1 TA26	
		R126	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R127	0RD1002F608	RESISTOR,FIXED CARBON-FILM	10K 1/6W 5 TA26	
		R128	0RD4701F608	RESISTOR,FIXED CARBON FILM	4.7K 1/6W 5 TA26	
		R129	0RD0912F608	RESISTOR,FIXED CARBON FILM	91 1/6W 5 TA26	
		R130	0RD0102F608	RESISTOR,FIXED CARBON FILM	10 1/6W 5 TA26	
		R131	0RD2703F608	RESISTOR,FIXED CARBON FILM	270K 1/6W 5 TA26	
		R132	0RD0102F608	RESISTOR,FIXED CARBON FILM	10 1/6W 5 TA26	
		R133	0RD3302F608	RESISTOR,FIXED CARBON FILM	33K 1/6W 5 TA26	
		R134	0RD0472F608	RESISTOR,FIXED CARBON FILM	47 1/6W 5 TA26	
		R135	0RD0221F608	RESISTOR,FIXED CARBON FILM	2.2 1/6W 5 TA26	
		R136	0RD0221F608	RESISTOR,FIXED CARBON FILM	2.2 1/6W 5 TA26	
		R137	0RD0102F608	RESISTOR,FIXED CARBON FILM	10 1/6W 5 TA26	
		R138	0RD0102F608	RESISTOR,FIXED CARBON FILM	10 1/6W 5 TA26	
		R139	0RD5602F608	RESISTOR,FIXED CARBON FILM	56K 1/6W 5 TA26	
		R140	0RD3901F608	RESISTOR,FIXED CARBON FILM	3.9K 1/6W 5 TA26	
		R141	0RD4701F608	RESISTOR,FIXED CARBON FILM	4.7K 1/6W 5 TA26	
		R142	0RD5602F608	RESISTOR,FIXED CARBON FILM	56K 1/6W 5 TA26	
		R143	0RD0102F608	RESISTOR,FIXED CARBON FILM	10 1/6W 5 TA26	
		R144	0RD0472F608	RESISTOR,FIXED CARBON FILM	47 1/6W 5 TA26	
		R145	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R146	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R147	0RD5602F608	RESISTOR,FIXED CARBON FILM	56K 1/6W 5 TA26	
		R148	0RD2700F608	RESISTOR,FIXED CARBON FILM	270 1/6W 5 TA26	

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S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		R149	0RD2700F608	RESISTOR,FIXED CARBON FILM	270 1/6W 5 TA26	
		R150	0RD1004F608	RESISTOR,FIXED CARBON FILM	1.0M 1/6W 5 TA26	
		R151	0RD2202F608	RESISTOR,FIXED CARBON FILM	22K 1/6W 5 TA26	
		R152	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R153	0RD1002G608	RESISTOR,FIXED CARBON FILM	10K 1/4W 5 TA26	
		R154	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R155	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R156	0RD1002G608	RESISTOR,FIXED CARBON FILM	10K 1/4W 5 TA26	
		R157	0RD2700G608	RESISTOR,FIXED CARBON FILM	270 1/4W 5 TA26	
		R158	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R159	0RD4701F608	RESISTOR,FIXED CARBON FILM	4.7K 1/6W 5 TA26	
		R160	0RD1004F608	RESISTOR,FIXED CARBON FILM	1.0M 1/6W 5 TA26	
		R161	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R162	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R163	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R164	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R165	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R166	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R167	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R168	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R169	0RD4702F608	RESISTOR,FIXED CARBON FILM	47K 1/6W 5 TA26	
		R170	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R171	0RD2202F608	RESISTOR,FIXED CARBON FILM	22K 1/6W 5 TA26	
		R172	0RD3902F608	RESISTOR,FIXED CARBON FILM	39K 1/6W 5 TA26	
		R173	0RD1002G608	RESISTOR,FIXED CARBON FILM	10K 1/4W 5 TA26	
		R174	0RD1002G608	RESISTOR,FIXED CARBON FILM	10K 1/4W 5 TA26	
		R175	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R176	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R177	0RD2702F608	RESISTOR,FIXED CARBON FILM	27K 1/6W 5 TA26	
		R178	0RD5603F608	RESISTOR,FIXED CARBON FILM	560K 1/6W 5 TA26	
		R180	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R183	0RD2201H634	RESISTOR,FIXED CARBON FILM	2.2K 1/2W 5 MF15	
		R184	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R185	0RD2700F608	RESISTOR,FIXED CARBON FILM	270 1/6W 5 TA26	
		R186	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R187	0RD1002G608	RESISTOR,FIXED CARBON FILM	10K 1/4W 5 TA26	
		R188	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R189	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R190	0RD2202F608	RESISTOR,FIXED CARBON FILM	22K 1/6W 5 TA26	
		R191	0RD3301G608	RESISTOR,FIXED CARBON FILM	3.3K 1/4W 5 TA26	
		R200	0RD1002F608	RESISTOR,FIXED CARBON FILM	10K 1/6W 5 TA26	
		R201	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R202	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R203	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R204	0RD1001F608	RESISTOR,FIXED CARBON FILM	1.0K 1/6W 5 TA26	
		R205	0RD1202F608	RESISTOR,FIXED CARBON FILM	12K 1/6W 5 TA26	
		R206	0RD1202F608	RESISTOR,FIXED CARBON FILM	12K 1/6W 5 TA26	
		R207	0RD2201F608	RESISTOR,FIXED CARBON FILM	2.2K 1/6W 5 TA26	
		R208	0RD2201F608	RESISTOR,FIXED CARBON FILM	2.2K 1/6W 5 TA26	
		R209	0RD8201F608	RESISTOR,FIXED CARBON FILM	8.2K 1/6W 5 TA26	

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S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		R210	0RD8201F608	RESISTOR,FIXED CARBON FILM	8.2K 1/6W 5 TA26	
		R211	0RD1201F608	RESISTOR,FIXED CARBON FILM	1.2K 1/6W 5 TA26	
		R212	0RD2401F608	RESISTOR,FIXED CARBON FILM	2.40K 1/6W 5% TA26	
		R213	0RD1801F608	RESISTOR,FIXED CARBON FILM	1.8K 1/6W 5 TA26	
		R214	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R215	0RD8200F608	RESISTOR,FIXED CARBON FILM	820 1/6W 5 TA26	
		R216	0RD1501F608	RESISTOR,FIXED CARBON FILM	1.5K 1/6W 5 TA26	
		R217	0RD1000F608	RESISTOR,FIXED CARBON FILM	100 1/6W 5 TA26	
		R218	0RD5603F608	RESISTOR,FIXED CARBON FILM	560K 1/6W 5 TA26	
		R220	0RD1003G608	RESISTOR,FIXED CARBON FILM	100K 1/4W 5 TA26	
		R221	0RD1003G608	RESISTOR,FIXED CARBON FILM	100K 1/4W 5 TA26	
		R222	0RD1003G608	RESISTOR,FIXED CARBON FILM	100K 1/4W 5 TA26	
		R223	0RD1003G608	RESISTOR,FIXED CARBON FILM	100K 1/4W 5 TA26	
		R224	0RD1003G608	RESISTOR,FIXED CARBON FILM	100K 1/4W 5 TA26	
		R225	0RD1003G608	RESISTOR,FIXED CARBON FILM	100K 1/4W 5 TA26	
		R226	0RD1003G608	RESISTOR,FIXED CARBON FILM	100K 1/4W 5 TA26	
		R227	0RD1003G608	RESISTOR,FIXED CARBON FILM	100K 1/4W 5 TA26	
		R228	0RD1003G608	RESISTOR,FIXED CARBON FILM	100K 1/4W 5 TA26	
		R229	0RD1003G608	RESISTOR,FIXED CARBON FILM	100K 1/4W 5 TA26	
		R230	0RD1003G608	RESISTOR,FIXED CARBON FILM	100K 1/4W 5 TA26	
		R231	0RD1003G608	RESISTOR,FIXED CARBON FILM	100K 1/4W 5 TA26	
		R232	0RD1003G608	RESISTOR,FIXED CARBON FILM	100K 1/4W 5 TA26	
		R233	0RD1003G608	RESISTOR,FIXED CARBON FILM	100K 1/4W 5 TA26	
		R234	0RD1003G608	RESISTOR,FIXED CARBON FILM	100K 1/4W 5 TA26	
		R235	0RD1003G608	RESISTOR,FIXED CARBON FILM	100K 1/4W 5 TA26	
		R236	0RD1003G608	RESISTOR,FIXED CARBON FILM	100K 1/4W 5 TA26	
		R237	0RD1003G608	RESISTOR,FIXED CARBON FILM	100K 1/4W 5 TA26	
		R238	0RD1003G608	RESISTOR,FIXED CARBON FILM	100K 1/4W 5 TA26	
		R239	0RD1003G608	RESISTOR,FIXED CARBON FILM	100K 1/4W 5 TA26	
		R240	0RD1003G608	RESISTOR,FIXED CARBON FILM	100K 1/4W 5 TA26	
		R255	0RD1202F608	RESISTOR,FIXED CARBON FILM	12K 1/6W 5 TA26	
		R256	0RD1202F608	RESISTOR,FIXED CARBON FILM	12K 1/6W 5 TA26	
		R257	0RD2201F608	RESISTOR,FIXED CARBON FILM	2.2K 1/6W 5 TA26	
		R258	0RD2201F608	RESISTOR,FIXED CARBON FILM	2.2K 1/6W 5 TA26	
		R259	0RD8201F608	RESISTOR,FIXED CARBON FILM	8.2K 1/6W 5 TA26	
		R260	0RD8201F608	RESISTOR,FIXED CARBON FILM	8.2K 1/6W 5 TA26	
		R261	0RD1201F608	RESISTOR,FIXED CARBON FILM	1.2K 1/6W 5 TA26	
		R262	0RD2401F608	RESISTOR,FIXED CARBON FILM	2.40K 1/6W 5% TA26	
		R263	0RD1801F608	RESISTOR,FIXED CARBON FILM	1.8K 1/6W 5 TA26	
		R264	0RD1003F608	RESISTOR,FIXED CARBON FILM	100K 1/6W 5 TA26	
		R265	0RD8200F608	RESISTOR,FIXED CARBON FILM	820 1/6W 5 TA26	
		R266	0RD1501F608	RESISTOR,FIXED CARBON FILM	1.5K 1/6W 5 TA26	
		R267	0RD1000F608	RESISTOR,FIXED CARBON FILM	100 1/6W 5 TA26	
		SW101	558T026A	SWITCH SPECIAL	TACT EVQ-114 04M H=4.3 TP	
		SW102	558T026A	SWITCH SPECIAL	TACT EVQ-114 04M H=4.3 TP	
		SW103	558T026A	SWITCH SPECIAL	TACT EVQ-114 04M H=4.3 TP	
		SW104	558T026A	SWITCH SPECIAL	TACT EVQ-114 04M H=4.3 TP	
		SW105	558T026A	SWITCH SPECIAL	TACT EVQ-114 04M H=4.3 TP	
		SW106	558T026A	SWITCH SPECIAL	TACT EVQ-114 04M H=4.3 TP	
		SW107	558T026A	SWITCH SPECIAL	TACT EVQ-114 04M H=4.3 TP	

[REPLACEMENT PARTS LIST]

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S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		SW108	558T026A	SWITCH SPECIAL	TACT EVQ-114 04M H=4.3 TP	
		SW109	558T026A	SWITCH SPECIAL	TACT EVQ-114 04M H=4.3 TP	
		SW111	558T026A	SWITCH SPECIAL	TACT EVQ-114 04M H=4.3 TP	
		SW112	558T026A	SWITCH SPECIAL	TACT EVQ-114 04M H=4.3 TP	
		SW200	554-635A	SWITCH PUSH	SPPH121AP013	
		TP101	561-656B	CONNECTOR	WAFER HAN FIM FW-0640-02A (N-N	
		TP102	561-656B	CONNECTOR	WAFER HAN FIM FW-0640-02A (N-N	
		TP103	561-656E	CONNECTOR	WAFER HAN RIM FW-0640-05A(N-N)	
		TP104	561-656C	CONNECTOR	WAFER HAN LIM FW-0640-03A N-N	
		T101	641-826E	TRANS POWER	110/220V 60HZ 9VX2/0.7A ZP	
		VR101	0RV1223D230	VARIABLE RESISTOR,CARBON FILM	22K 6 ST P3 L2.5 5	
		VR102	0RV1472D230	VARIABLE RESISTOR,CARBON FILM	4.7K 6 ST P3 L2.5 5	
		VR103	0RV1223D230	VARIABLE RESISTOR,CARBON FILM	22K 6 ST P3 L2.5 5	
		VR104	0RV1223D230	VARIABLE RESISTOR,CARBON FILM	22K 6 ST P3 L2.5 5	
		VR105	0RV1102D230	VARIABLE RESISTOR,CARBON FILM	1.0K 6 ST P3 L2.5 5	
		X101	616-020F	FILTER CERAMIC	RESONATOR CST4.00MGW MURATA(S)	
		ZD180	0DZ240009CE	DIODE,ZENER	MTZ24D-T-77 ROHM-K	
		X201	617T602E	CRYSTAL	16.9344MHZ KONY	
		ZD101	0DZ750009DD	DIODE,ZENER	MTZ7.5C-T-77 ROHM-K	
				*** END OF DATA ***		